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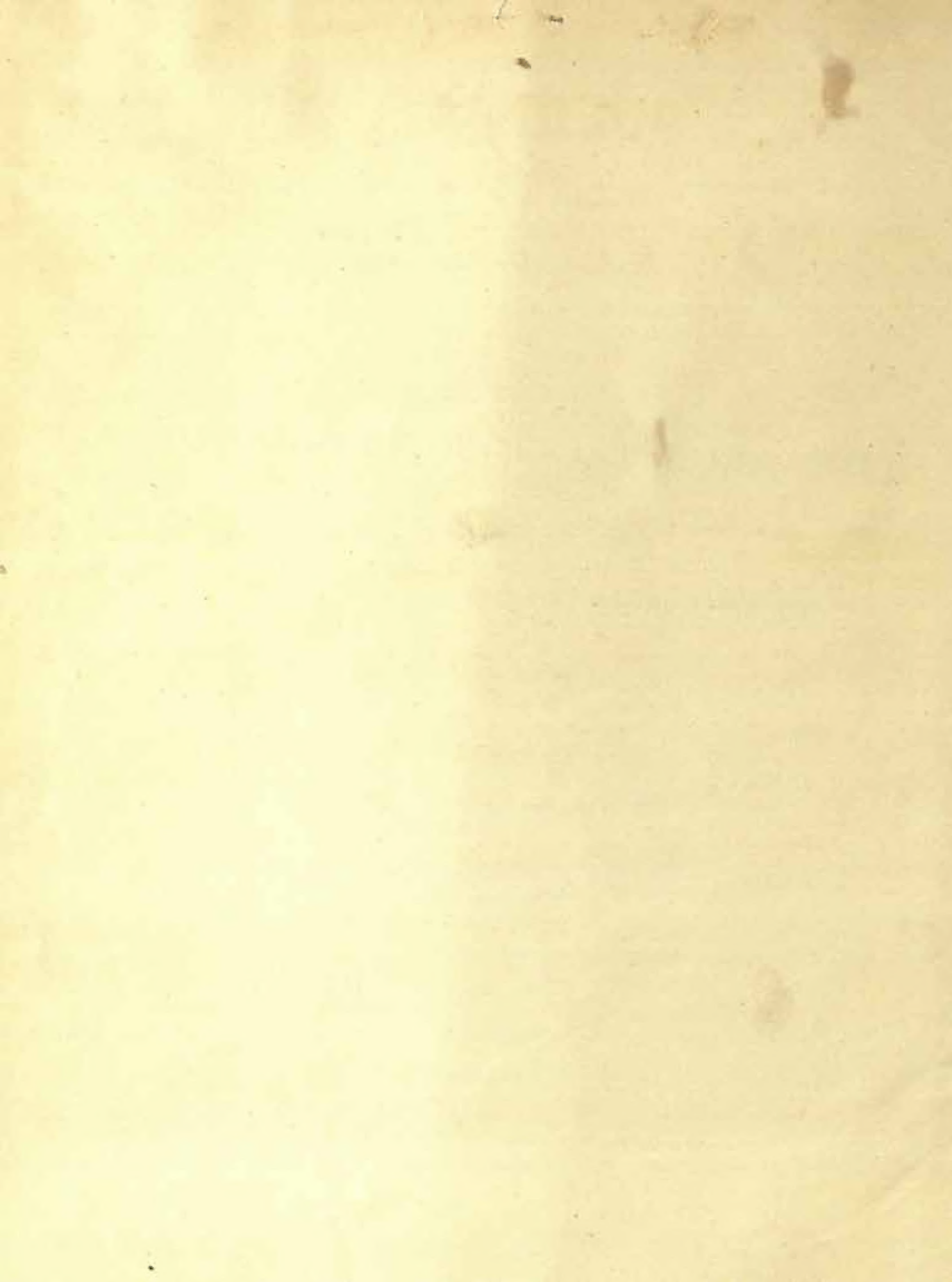
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THE OPENING ADDRESS. By the President, Mr. REGINALD BLOMFIELD, A.R.A.

Delivered at the First General Meeting, Monday, 3rd November 1913.

THE OUTLOOK OF ARCHITECTURE.

IN an address which I had the honour of giving in this room on a recent occasion I reviewed in a very cursory way the ups and downs of architecture in this country during the last hundred years. I brought my survey down to the rise and gradual failure of the Gothic Revival. To complete the main outlines of the picture, it is only necessary to remind you of the reappearance of Classic, and its gradual consolidation within the last twenty years. At the moment of its triumph, Neo-Gothic was already undermined by the rhetoric of its advocates, and even by the adventurous spirit of some who had been trained in the strictest sect of the Pharisees. It is now many years since raiding expeditions into the territory of the Renaissance were made by Devey, Nesfield, and Norman Shaw; and these have been followed up by a systematic study of Classical architecture which has resulted in the recapture of some at least of the scholarship of the art. Undoubtedly interest in architecture is more widespread than it was, and our literary friends are well to the front, telling us of our failures, what we ought to do and how to do it. Experienced architects are not very likely to be turned from the course they have set themselves by criticism and clamour, but the rising generation may feel some doubt and perplexity, and I think the time has come to take stock of the situation so far as it is possible to do so.

It is not an easy thing to do, and I must ask for your tolerance if I seem to you to misread the signs of the times. It is difficult to appreciate contemporary art with any certainty. One cannot get far enough back from it to place its features in right perspective. The tendencies that result in history do not lie on the surface, and what appears to be a new light may be only the will-o'-the-wisp of a passing fashion. Moreover, the problem of architecture is very complex; and as the power of literary expression is seldom in ratio to technical knowledge and ability, our guides and critics may possibly misapprehend the situation, and leave unnoticed those strong impulses in artists themselves which must be the foundation of any real progress in the future. Our critics do not always grasp the continuity of architecture, and its solid basis in facts, and, I believe, it is this omission which explains their hankerings after new styles and their clamour for originality, no matter whether it is good, bad, or indifferent. For some generations art criticism has suffered from a certain feverish impatience, which has blinded it not only to the intimate and necessary connection of the architecture of to-day with that of the past, but also

to the germs of future development, latent in that contemporary art which it is the common practice to minimise and disparage. It is only a few years back since critics, whose training should have given them more insight, complained of a lack of initiative in those who through good report and evil steadily pursued our national tradition of Classic architecture. Time has justified those men, and a very few years have shown the practical certainty of disaster that waits upon jumps into space.

That point of view has been dropped by serious critics, and our professional writers are too well informed to believe in the value or even possibility of any violent cataclysm in architecture, such as that now being attempted by the Futurists and the Cubists in painting and sculpture. We, at any rate, know that architecture is too serious an art to pay any attention to quack remedies. Meanwhile, architecture, or perhaps I should say architects, are attacked from another quarter, and the attack, I do not know whether consciously or not, is a repetition of the polemic of the Neo-Gothic enthusiasts of the 'seventies. A clever writer in the *Morning Post* has drawn a charming picture of those glorious days when Gothic architecture was run entirely by the Guilds: when the workman was unchecked by the architect and his T-square, working his own sweet will as a free and glorious artist; when the building craft was the greatest in the world, and the Guilds were its embodiment, storehouses of knowledge, "the vat," if I may quote his words, "into which the experience of all ran." The master masons, he asserts, were "cultured men, the associates of Princes and Scholars; they built with extraordinary audacity and imaginative resources." We are now told that architecture has lost this fount of inspiration, and we are bidden to throw over our scholarship, our draughtsmanship, our powers of design, our trained technical ability, and watch the "felicity of action and latent understanding" with which "a mason tosses and turns a brick." (I may mention in passing that the Bricklayers' Union would very soon be on his back if he did!) The writer, Mr. March Phillipps, is so haunted by the idea of an architect that he goes so far as to say that he never met a man, other than an architect, who had a good word to say for the architecture which ranges from the reign of James I. to that of George V. I think he must have forgotten Greenwich Hospital and Hampton Court, St. Paul's Cathedral and Somerset House; and without desiring to enter into controversy one is compelled to question the historical accuracy of Mr. Phillipps' charming idyll. I seem to detect the trace of an ingenious theory which a few years ago was spun round an obscure association known as the Cornacine masters. Were the Guilds the last refuge of the building art? the high-minded guardians of all that was noble and beautiful in architecture, thrust out of place by an arrogant intellectualism? Were they not in fact so hopelessly corrupt in their latter days that the "adverse legislation," as Mr. Phillipps calls it, became an absolute necessity of intelligent government? I would ask also, were the mediæval workmen the consummate masters of the building art that our critics would have us believe? Is it not also an historical fact that many of them built extremely badly, that church towers of the fifteenth century have simply collapsed in France, that some of their most ambitious ventures in construction, as at Beauvais, failed almost at once, and had to be precariously maintained by a network of iron bars? Those who have had the handling of old buildings have had it driven into them again and again that the average building of the Middle Ages was inferior rather than not. I am talking simply of building, not in any way of design, and details of ornament, and I say deliberately that at the beginning of the sixteenth century most of the master-builders were bad builders; and if our critic has any doubt on the matter, I would remind him of what happened in France in the reign of François I., and of the contemporary evidence of Philibert de l'Orme on the master-builders of his time.

Our critic imagines a divorce between the modern architect and his workmen that does not exist. "Labour," by which is meant the skilled labour of the building trades, is not in "the

state of helpless ineptitude and dull impotence" which Mr. Phillipps supposes. The architect is not a truculent and arbitrary tyrant, any more than the workman is a heaven-born but down-trodden artist. They are both, let us say, honest men trying to do their allotted work, and some of them do it exceedingly well. All good architects value a good workman; the unsympathetic attitude of architects is wholly imaginary, and the phrase "the untravelled workman" which Mr. Phillipps imputes to me, was, if I recollect aright, the invention of a somewhat intemperate champion of the Art-master, and I am not conscious of ever having used it at all. Mr. Phillipps makes a distinction between "creative construction" and "imitative construction"; the first he identifies with Gothic architecture, the second with Classic. Surely this begs the whole question; this distinction, which is to be the key to the architecture of the future, is only a repetition of the outeries of Ruskin. Nobody, no practising artist at any rate, ever thought about such things before his time. The idea is of purely literary origin, it has no justification in history; on the contrary, it makes the serious error of overlooking the work of tradition in both mediæval and Classical architecture, that slow and almost unconscious moulding of architectural forms from generation to generation. It is an idea that has arisen from the habit of regarding the details of architecture as architecture itself, of concentrating attention on words rather than on language. Nor, as a student of the history of architecture is one in the least disposed to accept the assertion that the architect is the *fons et origo malorum* in architecture, and that he is so by reason of his trained ability, for that is what the charge amounts to. The more closely one studies certain contemporary criticism of the arts, the more convinced one is that it is inspired by the dictum of the celebrated "Capability Brown," that "knowledge hampers originality." Mr. Phillipps says that in mediæval building there was not "a sign of a dictate, automatically delivered and passively accepted," but he has himself to admit that in more "important operations" the work would be "supervised by some craftsman of more than local repute." Indeed, unless human nature was different in kind in mediæval times from what it has been both before and since, building operations could only have resulted in Towers of Babel, unless there was somebody in control whose dictates were both delivered and accepted. That he was not equipped as a modern architect we are all agreed, but that he was a person of superior knowledge in control of the workmen is also certain, and this knocks on the head the engaging theory of the workman and his own sweet will. We have to get back to the facts, and I have dealt at some length with this criticism of modern architecture because Mr. March Phillipps writes so well that some danger to the right understanding of the art lurks in his well-turned sentences. The views that he advances are, I think, off the track of history. No serious advance is to be made by turning our back on the immediate past, or blinking the facts of the present and trying to jump the centuries. This idea that the hope of architecture lies in the untrammelled (not untravelled) genius of the British workman is the merest *ignis fatuus*. Anyone who has first-hand acquaintance with the condition of modern building, with the methods of modern construction, with the qualifications of the modern builder and the temper of the modern employer, knows that the suggestions of our critics are impossible in practice, and that even if they were possible the result would probably be an exaggerated version of the efforts of the speculative builder. The man of genius who first made popular this delightful dream of mediæval art had the excellent sense to call his message "news from nowhere." Morris's theory of architecture was just the expression of his own temperament, and the logical corollary of his personal conception of architecture as the drudge and vehicle of decoration on the one hand, and of practical necessity on the other. This view is constantly reappearing in modern criticism, but I would remind our critics that architecture is the greatest of the plastic arts, and that it is not its function to sit at the feet either of the ornamentalist or of the engineer. I do not think that architects are seriously alarmed as to the future of their art. They will agree heartily with Mr. Phillipps in his search

for simplicity and sincerity of statement. Where they will entirely decline to follow him is in his subordination of architecture to the ignorance and incompetence of "average labour"—(the phrase is Mr. Phillipps', not mine).

So far I have endeavoured to put before you what I may call external criticisms of architecture. We cannot entirely disregard them because they are widely read by the general public, and as they are usually stated in excellent English, they may have a far-reaching and unfortunate influence, against which we have to be constantly on our guard. The difficulties in which the art was landed by the unbalanced eloquence of a great writer in the last century are a matter of common knowledge.

Now let us consider the art from our own point of view. Anyone who has studied history knows how slow and gradual has been the growth of architecture, by centuries in mediæval times, by half-centuries from the dawn of the Renaissance down to the end of the eighteenth century. These advances, too, have been made not by deliberate intention, but almost on compulsion, in order to meet the changing needs of a constantly expanding civilisation. Looking back on the past we can trace the successive steps, we can show the development of construction and the gradual perfecting of technique, and we can follow more obscurely the trend of artistic thought, the gradual consolidation of those impulses which lie at the back of vital movement in the arts. The road is unbroken—where we miss it, there is no hiatus in fact, but only in our knowledge of the facts, and if there is one thing more certain in history than another, it is that of all the arts architecture is the most steady and consistent mover. The idea of the Futurists that architecture will advance by being turned upside down is not worth the consideration of serious students.

On the other hand, the arts do not stand still, architecture least of all, because it is essentially a practical art. Fresh problems present themselves in planning, provision has to be made for the ever-widening range of applied mechanical science, new methods of construction have to be considered, the practice of architecture becomes more difficult every year, and the modern architect has to deal with a range of subjects which would have paralysed his grandfather. The question we have to consider is how far these changed conditions are likely to affect design, and how we architects should set our course if we do not wish to drift on to the quicksands of futile experiment. It has sometimes been suggested that the future of architecture lies in a resolute rejection of all the accepted forms of architectural expression. What we are to do after this I am not quite clear, because some of our critics tell us that we should leave our steelwork and our reinforced concrete just as it is, and others want us to spin new forms out of our inner consciousness. Our critics are so dreadfully impatient, architects may well say, like the unfortunate debtor, "Have patience with me and I will pay thee all." But that is just what we are not allowed to do, because our public is never quite sure whether we are the enemy of society, or the *Deus ex machina* who can resolve every conceivable difficulty. The past fifty years have seen some desperate endeavours to invent something new, experiments in various styles in the past, and experiments in what is fondly believed to have no relation to the past. I think it is time we gave up these conscious and artificial attempts at originality, and let it find itself. Where our critics go wrong is in demanding a new language when they ought to be demanding new ideas. The old language will do very well if we are masters of it and have the brains to use it to the full.

Meanwhile history has been making itself, and making itself in a rather curious way. If we go back to the last quarter of the nineteenth century, we find that the orthodox Classic of the older school had dwindled away to dullness and decrepitude, the Gothic revivalists had broken loose in all directions and afterwards lost their clue, having condensed into some thirty years all the variations of an art that had taken five centuries to run its course. The more

original among these men had for years been feeling their way out with tentative excursions into the Renaissance: Nesfield at Kinnel, Devey in many a picturesque country house, Norman Shaw, who with all his genius in design reached his Classic too late in his career, and close on the heels of these came men who I am glad to say are still with us, and who won their spurs when some of us were still in our articles. Meanwhile a generation has grown up no longer content with odds and ends of detail, however picturesque, but anxious to get to the heart of things, and to grasp the informing spirit of Neo-Classic architecture. The technique of the art in its widest sense, not only in the nuances of detail, but in the larger aspects of planning and composition, rhythm and proportion, has received in recent years a study and attention such as had not been given to it since the days of Cockerell, and we have now before us versions of Neo-Classic which deserve to be taken seriously, and out of which, I believe, may ultimately develop that standard manner which is essential to the appearance of any such vernacular art as existed in civilised Europe in the first half of the eighteenth century. I think all close observers of modern architecture will admit this real advance, and this gradual *rapprochement*, as I have to call it, of the ablest designers that we have. It exists so far in a common point of view rather than in an identical manner; because we have varying versions of Classic all worth taking seriously—the attempt to pick up the thread of Cockerell's tradition—a possibly somewhat dangerous leaning towards the fashion of our colleagues in France—and the more sober manner based on our own Classic of the earlier part of the eighteenth century. That any one of these should sweep the field entirely is neither to be expected nor to be desired. Such a result would be alien to the genius of our race for individualism, and its robust dislike of pedantry.

Nor would it be a complete synthesis of all the factors in the case, for ecclesiastical architecture has yet to be taken into account. Our English clergy still cling to Pugin's totally un-historical claim that Gothic is the only possible form of religious architecture, and, Classical churches being ruled out of court, our architects have to persevere with Neo-Gothic. Let me say at once that some of them design in it with great ability, and that, so far as my observation goes, the architects of this country are the only ones who have got within range of the subtle and elusive spirit of mediæval art, so far as it is possible for anyone to do so. Then, too, there is that Byzantine strain which found such wonderful expression in Bentley's church at Westminster. Its influence is less marked than it was, but it has been a valuable factor in the advance of architecture, because in its austerity and reserve, in its feeling for surface ornament and the value of abstract form, it is akin in spirit to the purer forms of Classic art. All these elements the wise artist has to note, and, in spite of their different idioms, he may find a certain bond of kinship in their constant effort after simplicity of statement, and even the most ardent classicist may learn a lesson from the elasticity and resourcefulness of Gothic.

Let me say at once that I am not advocating the eclecticism that has done duty for design in the past. Every artist has to find his own personal method of expression, but the wider and deeper his range of study, the more flexible and the more assured will be his art. Craftsmanship in the sense of the dexterity of hand acquired by specialised work in one direction and on one material, is an admirable thing, but it is not architecture, nor does it represent the aim and ideal of an architect in regard to his art.

The only effective source of development in architectural form must be new conditions of building, and this will be very different from that new and original style for which our critics hanker. The fashion of ornament may change, but the problem of architecture does not lie with ornament, and the epoch-making discoveries in the art have arisen from practical necessities handled in the most direct and even uncompromising manner. Witness the Colosseum and the dome of the Pantheon. The designers of these great buildings did not trouble their heads about inventing fresh detail; what they found to hand was good enough for them. Where

the Roman architect was so great, greater even than the Greek, was in the masterly handling of a great conception, in that power of bringing the mind to play on the actual facts. The American skyscraper is also an example of a new form arising from new necessities, though the solutions have not always been happy, because the essential elements of tower design have been forgotten. It comes, I think, to this, that although new architectural forms in the sense of new outlines, new groups and masses will naturally develop out of the changing problems of civilisation, no necessity arises for anxious effort to change the ordinary vocabulary of architecture. Perhaps of all futile experiments in originality the competition for a new French order to glorify Louis XIV. was the most gratuitous and the most ridiculous.

The question still remains how we are to deal with inventions such as reinforced concrete when used for the exteriors of buildings. Are we to adhere to the shibboleth of the Gothic revival, and show our construction naked and unashamed, and are we to suppose that our æsthetic sense will alter so materially that we shall presently find pleasure in ranges of openings supported and separated by the thinnest piers to which the engineer can reduce our points of support? What may happen to our æsthetic sense in the future no one can say in view of the chronic assaults made on the sanity of the public. The only evidence is what has happened in the past, and that evidence shows that though from time to time there have been eccentric aberrations, the orbit of taste has ranged between fairly determinable points, and those points have not included such skeleton building as is of the essence of reinforced concrete construction. If, as I incline to think, our dislike of it springs from some deeper instinct than mere unwillingness to change, we must reserve our freedom to use inventions such as reinforced concrete as mere instruments of building in the same manner as we use steel construction, or as the Romans used their system of brick ribs and arches. I see no reason why, in dealing with this and similar methods, we should not avail ourselves of all the weapons in our armoury, translating our construction into such forms as will best express the central conception of our design. In other words, we are not compelled to subordinate our design to the instruments we employ. There is always a touch of the aristocrat about the mistress Art.

What conclusion is to be drawn from the considerations I have endeavoured to put before you? What is it we should aim at, and how far are we likely to realise our aims?

We have to accept the fact that we are at the end of 150 years of eclecticism. The last genuine tradition died with Chambers. His successors carried on his manner, but other elements had come into play, the Romantic movement on the one hand, and the age of archæology on the other. Architecture, most unfortunately, came within the literary net, and it has not yet escaped it. Hitherto—that is, till the latter part of the eighteenth century—architects had studied old work assiduously, but it was with the object of perfecting their technique. The archæologists have worked with quite different objects, and though they have done invaluable work in extending and correcting our knowledge of the past, their labours have had the curious result of placing architecture on the wrong issue, and of reducing architects from time to time to a state bordering on imbecility from the very profusion of the details at their disposal—a fact that will need attention in the conduct of the new British School at Rome. From this state of things I think we are emerging; the limits and the relation to each other of architecture and archæology are becoming clearer, and the conviction has been steadily growing in the mind of architects that details are but the outside of the cup and platter, and that their value is conditional on the use that is made of them. This is the first step towards the reorganisation of architecture and its recovery from the chaos of the nineteenth century.

We cannot escape the difficulty of modern architecture, that we are offered too wide a choice, that there are too many wells to draw from in the interminable issues of photographs and illustrations, and also that there are too many fashions set by irresponsible people. The

temptation to yield should be met if our architecture is to be robust ; and the way to meet it is to shape differently at the problem of design, to search for the idea, and let the form develop out of it. A master idea carries with it its own expression, and, to a mind well stored with the language of architecture, the form follows the idea so closely as to be almost inseparable from it.

I am not going to attempt any prophecy as to the future of architecture in this country. My own view is that genuine progress is likely to be made only along lines already laid down, by the skilful use of opportunities as they occur in plan and construction, and by the watchful care of all elements in design that pull the same way, namely, in the direction of strength, refinement, and sincerity of statement. Our French colleagues, I am told, deprecate our ventures in monumental Classic, and would urge us to follow the models of Late Gothic or even of Jacobean architecture. I can only suppose that these gentlemen are unacquainted with the work of Wren and Vanbrugh, Hawksmoor, Gibbs, and Chambers. In the work of all these men there is latent a tradition, still unexhausted, still capable of development and application to the problems of modern architecture ; and this question of tradition is of the first importance. We ourselves are, I believe, slowly moving towards the only possible standpoint in gradually concentrating on the tradition of English architecture of the eighteenth century, and our French critics seem to me to have shown little wisdom in deserting the splendid legacy of the Gabriel. What can be done by working on the lines of national architecture has been shown in some of the buildings of that accomplished architect, Ludwig Hoffmann, of Berlin ; perhaps a little over-accentuated, a little over-strenuous, but, as far as I understand it, stamped with the genuine impress of the traditional architecture of the German States.

Our course then is clear. We are not to be rushed by the outcries of our critics, or moved to hurry by frantic attacks on architects, made sometimes for reasons quite unconnected with architecture. We should pursue our steady way, strong in our knowledge of the past and in our faith in the future, and in that enthusiasm which is the privilege of creative artists. For this kinship of artists should be the real bond of union between architects, the source of that honourable fellowship, without which individual efforts must too often fail. And in concluding my remarks I would urge the value, and indeed the necessity, of this *esprit de corps*. The career of an architect is by no means an easy one. Unforeseen difficulties may arise in his way, and he may need that helping hand which, I hope, will never be refused by his colleagues. In all such cases we should stand by our brethren. Moreover, there are intricate and difficult questions to be determined by the profession in the near future, one in particular which has blocked the way for a generation and which has for years received the anxious consideration of successive Councils of this Institute. I have every hope that at a near date your Council will be in a position to offer you its considered suggestions for the solution of that question. I will only remind you that such questions can only be settled by pulling together. You will recollect Esop's fable of the bundle of sticks. It is not to be supposed that any method can be devised which will be wholly acceptable to everybody. But when the solution to which I refer is suggested to you, I feel sure that this *esprit de corps* will have the full scope and bearing that it should have in a great profession such as ours, and that we shall not trust in vain to this same honourable sense of fellowship.

VOTE OF THANKS TO THE PRESIDENT.

THE RIGHT HON. LORD MILNER, G.C.B., in proposing a vote of thanks, said: The task has been entrusted to me of moving a vote of thanks to Mr. Blomfield for the address which we have just listened to. I feel myself in a very delicate position, and in the few sentences which I shall venture to address to you I am conscious that I shall be treading among pitfalls. It is no small undertaking to comment, even in the most cursory manner, upon an address so full of controversial points, and to comment upon it before an audience of experts when one is oneself an unskilled layman. Fortunately for me, Mr. Blomfield's remarks have covered so wide a field, that there is a great deal in them which may be referred to without touching upon controversial questions in architecture. As I listened to him, I could not help admiring the fact that his lifelong devotion to architecture has not prevented him from cultivating some other arts—perhaps all, but certainly the art of literary expression. He was rather hard, I thought—rather parricidal I might almost say—in his remarks about literary men, for if there really were as much antagonism as he seemed to suggest between literary epigram and architecture, I can only say that, after my experience to-night, I should begin to lose the immense faith which I have hitherto felt in him as an architect. I think we must all have been struck by, and admired, the lucidity, the conciseness, the verve with which he expressed his strong opinions, not without a certain spice of pugnacity. I could believe it, if some one were to tell me that in the course of his strenuous life he had been engaged in a good many controversies. I am sure that if he has been—of course, I know nothing about these things—but if he should happen to have been, while he has given many a doughty blow, he has always fought without a touch of acrimony, and that in all the controversies which he has engaged in he has always been animated by the highest conceptions of his art, and has always fought, if I may say so, primarily for its honour and glory. I do not think anyone who has had the pleasure of listening to him to-night can feel any doubt on that subject. Therefore, I can well believe that it is not only for his own great achievements as an artist, but also for his great belief in the Mistress Art, his great loyalty to it, and for that spirit of good fellowship with other artists on which he dwelt so eloquently at the end of his remarks—I am sure that for all these reasons he enjoys, and justly enjoys, the esteem and the affection of all those who are engaged in the same labours as himself. Ladies and gentlemen, any man who does good service to architecture does great service to the State. Of all the arts, this is perhaps the one which has the widest range of influence, and the welfare of

which is of the most vital importance to the great body of the community. We may—I am afraid many of us do—pass through life untouched by the other arts, except possibly music, although I know many people who are untouched even by that—but it is impossible to escape from architecture. Consciously or unconsciously, the Mistress Art has got us all in her grip. Whether the experience is elevating or depressing, pleasant or painful, we are always exposed to her influence. And for that reason I say that anything which is calculated to raise the level of architecture, to keep up its highest traditions, and possibly some day to bring us back to something like an accepted standard, is of the greatest importance to the whole community. I often wish that we had in this country something like what the Romans had, I mean *ædifices*. I do not wish to suggest that mere bureaucrats should be put into a position to repress the individuality of artists; far be any such idea from me; but I do feel that the public is entitled to some protection, and certainly I should think that any wise Government, if it did adopt the idea—which I do not know is a bad one—of establishing a Ministry of Fine Arts, would do so not with the idea of controlling art, but, on the contrary, of giving art some voice in controlling the vagaries of pure commercialism, and so of assisting, as I say, to protect the public. I do not wish to detain you too long, but there is one humble illustration of my meaning which I may just give you. I do not know if any of you have studied the recent numbers of *Country Life*. A very interesting discussion has been going on in the columns of that journal about the proposal, with (which we are threatened, for the erection of 120,000 cottages all over England by the State. I am an enthusiastic supporter of the movement for an increase in the number of cottages, for I do not think there is any one social reform more greatly needed. Living in the country myself, that is brought home to me every day. But there comes in my wish for *ædifices*, for some sort of public control, because, as has been well pointed out in the columns of *Country Life*, it is too terrible to contemplate the possibility that, in the name of economy, this country should be endowed with 120,000 yellow brick boxes with slate lids. There is a real danger of something very terrible happening to the beautiful English countryside, if we are to have an enormous multiplication of small cheap buildings without any sort of public control. I for my part am prepared to go a long way in this matter. I know there is a necessity for these buildings, I know the importance of economy, but, speaking as a political economist, I think it would be worth the while of this wealthy country to spend 30 per cent., or even 50 per cent. more on these erections—if they are to be erected with public

money—in order to prevent the English countryside from being studded all over with a vast number of small, unsightly, and unsuitable buildings. Because, apart entirely from every other consideration, I think that the beauty of the English country, which is partly due to the extraordinary charm of its old mansions and old cottages, and which is, perhaps, unique in the world, is an invaluable national possession; and a few millions spent on the preservation of it would be—putting it on the very lowest ground—an admirable investment. I have ventured to take that very humble illustration of my meaning because, especially before this audience, I should not like to attempt any high flights in the way of architectural suggestion. In what I have said I am sure I am on very safe ground. Ladies and gentlemen, I feel confident you will cordially support me in the proposal to give a very hearty vote of thanks to my friend Mr. Blomfield for a paper so interesting and suggestive; a paper which, I am sure, will command the highest respect from his fellow artists, but which was also full of charm for the least expert of his hearers.

Mr. CYRIL COBB, Chairman of the London County Council, in seconding the motion, said: It gives me the greatest possible pleasure to second the vote of thanks which has been moved so ably by Lord Milner. I have been brought into connection with your President, because he has been able to be of very considerable service to the Council in a matter in which, indeed, it seems to me, the London County Council is acting somewhat in the position of those ædiles which were referred to by Lord Milner. And I am very glad that should be so, because we were enabled to have the presence of your President to assist us in a very difficult and intricate piece of work in connection with the settlement of what was to be done with the approach to the Mall and the Charing Cross Improvement. And I may say here—and this is my principal reason and principal pleasure in seconding this resolution tonight—that I am quite sure of this, that if your President had not been a distinguished architect he would have been a distinguished diplomatist: he had the most varying and conflicting interests to reconcile on that particular occasion. I believe that those varying and conflicting interests have been reconciled, and that by his co-operation and by the help he gave us as the Authority for London, we shall eventually reach a solution which will be to the advantage of London from the architectural point of view, and which will give the greatest possible satisfaction to the three bodies principally engaged in bringing to a conclusion that particular piece of work. That we, and London, will owe to your President. Therefore, it gives me the greatest pleasure to second this resolution for a very hearty vote of thanks to your President, which has been so ably moved by Lord Milner.

LORD MILNER then put the vote, and it was carried by acclamation.

THE PRESIDENT, in responding, said: I have listened to the speeches of the proposer and seconder with a good deal of interest, and find that I am represented in somewhat different lights. Lord Milner, himself a first-class fighting man, was good enough to suggest that I was a humble performer in that direction. On the other hand, Mr. Cobb said I was a first-class diplomatist. They are both most excellent things to be. As a matter of fact, I am a man of peace, inclined to steer a middle course between the two. But those speeches touched on some extraordinarily interesting things. Lord Milner suggested that we should have ædiles. As far as I recollect what an ædile was—though it is going rather far back in my memory—an ædile was a man who saw that the thing was done in the right way, and that no outrage on the public taste was perpetrated. And we have several meritorious bodies trying to do that at the present moment, though, I fear, none of them with complete success. I am not going to offer any opinion on the very difficult question of a Ministry of Fine Arts; that is undoubtedly becoming a burning question which will probably have to be thrashed out in the very near future—whether for or against, I am not in a position to say. In any case it will have to be seriously considered. Lord Milner touched also on those 120,000 cottages. We come to this conundrum: either we are to have reasonable cottages which will not be a horror in the neighbourhood, or they will have to be built within this figure, which appears to be the standard figure, of £110, which architects in practice know to be perfectly ridiculous; and the sooner some of these absurd ideas which are scattered about before the public are put right, the better. Lord Milner was good enough to say some very kind things, and to refer to my enthusiasm. It is the enthusiasm of us all; all the members of the Council with whom I have the pleasure and honour to work are anxious to do the best for architecture, and our object, to use Lord Milner's own words, is to raise the standard of architecture and keep it up to its highest tradition. That is the object of all serious architects, and I think it will be found that that is the object of this Institute. We have for years been trying to do something of this sort, to discriminate between the totally unqualified person and the qualified person, and to keep up a reasonable standard of attainment for anybody who will practise architecture. And I hope that proposals will be put before you by your Council in the very near future, and that you will give them the most candid and impartial consideration, and that out of the years of effort and trouble will come a really permanent solution of this most difficult question, namely, how we are to keep up the great traditions of architecture in this country.

THE OLD PAINTED GLASS IN THE PARISH CHURCHES OF YORK.

By GEORGE BENSON [A.].

Read before the York and Yorkshire Architectural Society, 24th January 1913.



FIG. 1.



FIG. 2.



FIG. 3.

ALL SAINTS', NORTH STREET: FROM EAST WINDOW.

THE writer has previously read a paper before this Society on Old Painted Glass. On that occasion he dealt exclusively with the glass at the Minster.* He now continues the subject with reference to the parish churches.

* JOURNAL R.I.B.A., 25th June 1910, p. 636.

Many persons entering York's ancient churches are pleasantly surprised by the extent and beauty of the mediæval painted glass, for in other towns there is often not even a fragment to be seen. Owing to age and various causes, such as the fragile nature of glass, the action of the sun, rain, and wind on its external surface and on the leading,

and, moreover, the besieging of the city in 1644, when it suffered from bullets and cannon balls, we cannot see the glass in its pristine beauty. In spite of all these drawbacks much of the York glass is well preserved, mainly owing to restoration, in which process some of it has suffered.

In other cases fragments have been leaded together in an indiscriminate manner, producing a confused mass of coloured glass, and making it difficult to trace the significance of the original design. For all that, we are glad the fragments have been preserved, for with much ingenuity the subject can sometimes be made out.

In our time, books, illustrations, and pictures are very common, but in mediæval days manuscripts were scarce, and pictures scarcer still. The Church, by its use of painted glass, did a great educational work. Jesus and the Saints were brought vividly before the people by being represented with the emblems of their martyrdom, and with the chief events in their lives in picture. The carrying out of works of mercy was also portrayed, and reminded all who gazed on them of their duty to their less-favoured brethren.

The principal figures or subjects occupy the upper part of the window, with the chief figure or event in the centre; underneath, a Latin inscription, occasionally with date, crosses the window. Below are other subjects, with the donor, his wife, and family.

ALL SAINTS', NORTH STREET.

The Church of All Saints, North Street, is justly renowned for its old glass, which is contained in three-light windows. The earliest is at the east end of the aisles, and appears to have been made during the first quarter of the fourteenth century.

The south aisle window has on the quarry glazing two rows of single figures under canopies. There is a space between them and the border. The upper row shows the Crucifixion and St. Mary and St. John. Below, the Agony in the Garden is depicted, and on either side is a figure of a female kneeling. The central border is heraldic, having triple-towered castles alternating with covered cups, in allusion to Queen Eleanor, to whom King Edward I. erected the well-known beautiful crosses where his Queen's body rested on its funeral march.

Similarly, single figures under canopies are in windows at St. Denis' and at St. Martin's, Micklegate, where there is also a "Crucifixion" window filled with single figures under canopies.

The north aisle window at All Saints' has groups of figures under the canopies. The lower ones are under short canopies, but the upper ones have tall gabled and tabernacled canopies. The subjects of the figure groups are the Annunciation, Nativity, Adoration, Crucifixion, Resurrection, and the Coronation of the Blessed Virgin. The three quatrefoils contain figures:—St. Michael the Archangel, St. George of England, both of whom are

depicted slaying dragons, and St. Mary, who is crowned as the Queen of Heaven. The central border and the chequy ornament of the canopy shafting is similar to the south aisle window. The same ornament is at St. Martin's.

Richard Rolle, who lived during the first half of the fourteenth century, wrote a poem called "The Prick of Conscience," in which he describes the last fifteen days. It was a popular piece of literature, and as there were no printing presses, his account of the last fifteen days was published with coloured illustrations in glass, in order that the citizens of York might become better acquainted with it. For four and a half centuries it has been there to tell the story, but I have no doubt there are many who have not even heard of this window at All Saints'!

The border, which has been such a feature in the earlier windows, disappears, for the canopy shafting is brought to the edge of the light. The shafting is widened, and in it is introduced a niche containing a figure; this becomes an important feature in the later York shafting. Along the base of the window are kneeling figures of the donor, his wife, and seven children. Above, the subjects commence with the western panel. Under each of the fifteen pictures are two lines (some mutilated) in English, taken from the poem:—

(The first day, forty) cubites (certain
The sea shall) rise up (aboven every mountain.)
The second day, the sea shall be
So low as all men shall it see.
The third day, it shall be plain
And stand as it was again.
(The fourth day,) fishes shall ma(ke a roaring
That it shall be hideous) to man's (hearing.)
The fifth day, the sea shall burn
And all the waters that may run.
The si(xth day,) shall (spring on) trees
(Bloody dew) drops (which shall show on) bees.
The seventh day, houses will fall
Castles and towers and every wall.
The eighth day, the rocks and stones
Shall burn together all at ones.
(The ninth) day, (a great) earth din (will be
Gener)ally in every (country.)
The tenth day, for (to neven)
Earth shall be plain and even.
The eleventh day, shall men come out
Of their holes and wend about.
The twelfth day, shall dead men's bones
Be set together and rise all their own.
The thirteenth day, should all
Stars from the heaven fall.
The fourteenth day, all that lives then
Shall die, both child, man and woman.
The fifteenth day, you shall betide
The world shall burn on every side.

The twelfth and thirteenth days have been transposed in the window. The two quatrefoils depict St. Peter at the gate of heaven welcoming the blessed, and Satan receiving the wicked into hell.

The remainder of the painted windows have fine lofty octagonal galleried, gabled, and pinnacled canopies, with figures looking out from the balconies. These elaborate canopies are supported by buttresses, some having a niche with figure. The central canopy differs by having a spire supported by rich arcaded flying buttresses. The canopies and shafting are white enriched with yellow, the former are usually on alternate red or blue backgrounds. The subject panels have diapered or leafy pattern backgrounds in alternate colours of blue and red.

The Acts of Mercy are illustrated in a window in the north aisle. There are six panels depicting the feeding of the hungry, giving drink to the thirsty, showing hospitality to the stranger, distributing clothing to the needy, visiting the sick at home and those in prison. Prison is represented by the stocks, in which three men are placed: a foot of each is further secured by an ankle iron attached to a chain formed of rectangular links; behind stands the gaoler with wand.

In the window base the central panel shows the sun surrounded by seven stars in a blue sky above a sunlit sea. The eastern panel depicts the donor and his wife, both clothed in scarlet, kneeling and uttering "Pray for us St. . . ." The other panel shows a Benedictine monk, habited, for artistic purposes, in blue, and praying from a book opened at the words (rendered) "St. Cecilia, pray for us; St. Lucy, pray for us."

The central light of the east window depicts St. Anne teaching the Blessed Virgin to read (Fig. 2), with the Baptist (Fig. 1) and St. Christopher (Fig. 3) in the adjoining lights. The figures are under canopies (Fig. 1).

Below, the central panel depicts the Trinity. The Father is seated on a throne, and exhibits His Son on the Cross, with the Holy Spirit in the form of a Dove near the head of Christ.

On the southern side is depicted Nicholas Blackburn, senior, Lord Mayor 1413 and 1429, and Margaret, his wife. He kneels, dressed in armour, with surcoat bearing gules, a lion rampant chequy ermine, and says—the original is in Latin—"May the triune and only King bestow on us the gift of pardon," whilst his wife's prayer-book is opened at the words signifying "O Lord, open thou my lips, and my mouth, etc." An inscription is to this effect: "Pray for the souls of Nicholas Blackburn, senior,

sometime Mayor of the City of York, and Margaret, his wife." He died in 1432, and was buried in the Minster.

The northern panel depicts Nicholas Blackburn, junior, and his wife, Margaret (Fig. 4), probably the donors of the window.

The Incredulity of St. Thomas forms the subject of a window in the north aisle. In the central



FIG. 4.—ALL SAINTS', NORTH STREET: FROM EAST WINDOW.

light is Our Lord, and in the adjoining lights St. Thomas and St. Michael—the latter figure has been mutilated.

In the south aisle are figures of St. William (the local Saint) and St. John the Evangelist, with a quill pen and a clasped book, on which stands a golden eagle holding in its beak an ink-horn.

Another window depicts in the centre the Blessed Virgin, the Baptist in the eastern light, and Our

Lord appearing to a Bishop at Mass in the other light.

One window is filled with interesting fragments, including a robe embroidered with a floral design in which talbots are placed.

CHURCH OF ST. DENIS.

The earliest glass in the York churches is probably that having medallion subjects, and occupying the centre of a three-light window at the church of St. Denis. It consists of a diapered ground overlaid with geometrical figures, consisting of a square on edge alternating with a circle, the latter being filled with a subject. The upper one contains a number of figures, whilst in the lower medallion is a figure usefully employed in preventing Satan coming out of his abode.

Three windows, each having three lights and three quatrefoils in the tracery, contain glass of the Edwardian period. The upper portion of each light depicts a Saint under a canopy; the figure is on a red, blue, or a green diaper. The lower part of the window has on the diaper figures kneeling or small medallions. The quatrefoils have figures or small medallions inclosing heads.

One window commemorates the Baptist; the central subject has been replaced by the "medallion" light. The others depict St. John in the Wilderness and his decapitation. The canopy has an ogee arch with finial in an embattled parapet, within which rises a crocketed spire amidst pinnacles. The niche is trefoiled, and rests on shafts having capitals, and is attached to buttresses terminating in pinnacles. On either side of the "Wilderness" panel are bushes, the foliage of which crosses the canopy shafting; the oak is represented on one side, and a heart-shaped leaved tree with bird on the other side.

Another window forms a complete design intended for doubters of the Resurrection. It shows the unbelieving Thomas, convinced at last that Jesus had risen from the tomb. St. John the Evangelist is depicted in the eastern light. Under the figure of Jesus is shown the donor of the window praying "O Lord, have mercy upon me." The medallion in the side lights contains the letter T. The canopy consists of a cinquefoiled ogee arch with ball flower enrichment, and crocketed and terminating in a foliated finial. The canopy rests on narrow shafts within diagonal buttresses. The borders are heraldic, the central one having the lily of France alternating with the lion of England, whilst the side borders show castles interchanged with covered cups.

The third window is of similar design, but has in the base a kneeling figure in each light, depicting the donor—who is in the act of presenting the window—and his wife and son. The central panel is diapered with roses, and the side one with bees.

Figures occupy the quatrefoils, in the upper of

which the Crucifixion is represented, and in the lower ones the Blessed Virgin and St. John.

The central subject of the window is the Blessed Virgin with the Infant Jesus. In the eastern light, St. Margaret is shown bareheaded and without nimbus, and in the act of thrusting the end of a crozier into the mouth of a dragon. The figure in the western light has disappeared. The central border has golden crowns on a blue ground, and the side borders have lions passant gardant.

A five-light window with flowing tracery is a "Jesse" window. The figures, representing the ancestors of Our Lord are in vesica-shaped panels. There are twenty mutilated panels.

The east window is also of five lights, but has rectilinear tracery, in which the two outer lights are grouped under a sub-arch. In the apex are four figures, two of which are of St. Christopher and St. James. There are two smaller figures in the apex of each sub-arch. Over the central light two angels are shown holding shields, one being that of Scrope of Masham.

The window is filled with figures under canopies, which are octagonal and pinnaced, and rest on buttresses, which are niched and contain figures. The central light depicts the Crucifixion; into a cup flows a stream of blood from the left arm. The adjoining lights, as usual, contain figures of the Virgin and St. John. The outer lights depict Bishops, the southern one being St. Denis, the patron Saint of the Church, who is represented headless, but with nimbus, and holding in both hands a decapitated, mitred head, illustrating his martyrdom. The backgrounds to all the figures have bands across them. Below the Crucifixion is an inserted panel depicting a Coronation scene.

The lower part of a four-light window has three tiers of panels filled with fragments, amongst which are the following:—A dragon in a chalice, the emblem of St. John; on part of a cross, the head of Christ with the crown of thorns; three trumpeters with banners; a man holding an owl; part of a mailed figure with vizor raised, and a bearded Pope between a woman and the devil.

The tracery of a three-light window in the south aisle is filled with the Heavenly Choir between angels censing, and while one man is playing and blowing an organ with hand bellows, another plays a barrel-shaped musical instrument. The central light depicts in a rayed oval St. Mary with triple crown, while in the apex the Holy Spirit is represented in the form of a Dove. The side lights have, under canopies, mutilated figures, one being St. Barbara.

ST. MARTIN'S, CONEY STREET.

A large five-light window at St. Martin's, Coney Street, is dated 1437. There are three subject panels in each light under a tabernacled canopy supported by niched buttresses which continue to the base. The niches are filled with figures of men,

lions, and eagles. The window depicts the life of St. Martin. He is shown by a large figure in the middle light, and is surrounded by representations of incidents in his career. These are his enthronisation as Bishop of Tours, his reception by a King, his serving St. Hilary, who is celebrating Mass; raising a dead person to life; celebrating Mass when the Holy Dove descended on him; receiving a young woman brought to him for punishment; leading an army; lying ill in bed; dividing his coat with a beggar; encountering Satan; seeing a vision; protecting a hare from the hounds; and lastly his death.

The two rows of panels in the base have in each panel the letters R.S. intertwined within a twisted design of vine leaves. The panel under St. Martin contains a figure of the donor, Robert Semer, Vicar of the church. In the tracery are figures of angels.

The glass in the clerestory over the north arcade has some beautiful figures. Commencing from the west are two figures of Archbishops. In the adjoining window are the four Doctors of the Church, viz. SS. Ambrose, Augustine, Jerome, and Gregory. The subjects above depict the four Major Prophets suffering punishments, Daniel in the den of lions, Ezekiel, Jeremiah, and Isaiah sawn asunder. Along the base are figures kneeling. In the third window are the four Evangelists with their emblems and names below, and in the base are figures kneeling. The adjoining window contains a figure of St. Barbara, shown in the cloak with which she was miraculously covered when condemned to pass nude through the city. Also figures of St. Catherine, St. Wilfrid, and St. Denis. The subject of the central lights of the easternmost window is the Annunciation, with figures of the Archangel Gabriel and the Blessed Virgin; in the outer lights are St. Christopher and St. George. In the base are figures at prayer.

In the south aisle windows are figures of Our Lord, St. Barbara, and St. George; also interesting fragments which include a number of heads.

* ST. MARTIN'S, MICKLEGATE.

The life of St. Martin was also depicted in an earlier window at St. Martin's, Micklegate, but all that remains of this one shows St. Martin on horseback, dividing his cloak with a beggar in accordance with the legend: "One severe winter, while the army was at Amiens, St. Martin met at the gate of that city a beggar almost naked, and ready to die from the cold. St. Martin quickly drew his sword, and cutting his cloak in two, gave half to the beggar. In the night, it is said, Christ wearing the half cloak appeared to St. Martin and said it was to Him that he had given it, and He accepted this deed of charity." The panel of St. Martin has been inserted in the middle light of the beautiful east

window in the south aisle. The adjoining lights have figures of the Blessed Virgin and St. John; the central subject was doubtless the Crucifixion, now replaced by St. Martin.

The figures are under gabled canopies surmounted by tall pinnacles, on either side of which is a Merchants' mark, being the letter N holding in the centre a bannered cross and with a star below the letter. Below the subjects, part of an inscription remains, signifying "Pray for Nicholas," but the surname has gone. The central border is heraldic, the three fleur-de-lis of France alternating with the three Plantagenet lions of England. The side borders have the vine leaf.

Two of the quatrefoil lights have censing angels; the upper quatrefoil had probably Our Lord in Majesty, but now contains modern glass. Each angel is knelt on one knee, and the way in which the angel is fitted into the quatrefoil is worthy of notice. The angel is on a red diapered background with a white rose on either side.

A window in the north aisle has single figures under gabled canopies. The central one has gone, but in the adjoining lights are figures of St. John the Baptist and St. Catherine. The border contains a Merchant's mark—a cross betonne continued through a triangle, under which is the letter R, which may be for a member of the Ros family.

In the south aisle are figures of three female Saints: 1. St. Mary of Egypt, illustrating her dwelling alone in the wilderness, her hair growing long enough to be a covering when her garments fell to pieces; 2. St. Agnes, with the holy lamb at her side. The legend of this virgin and martyr is that "the Christians buried her in the Via Nomentana, and her tomb became their place of assembly for devotion, and there one day she appeared to them with a lamb by her side, and told them of her perfect happiness and glory; 3. St. Lucy is depicted with her neck pierced by a sword, the story of her martyrdom being that "finally a large fire having been kindled around her without harming her, a soldier pierced her neck with a sword that she died."

In the adjoining light one of the brethren of the Order of St. Anthony is shown in a blue habit, and wearing the badge—a tau cross with bell under. The brethren had their hall on Peaseholme Green. It was a custom with the citizens, when a sow littered, to set a little pig apart and feed it for the brethren of St. Anthony. These pigs were so well fed that "as fat as an Anthony pig" became a proverb.

There are two remarkable panels each about nine inches by six in yellow stain. One depicts the Betrayal of Christ by a kiss from Judas, who has come with a number of soldiers. The Saint, who has cut off the ear of the servant of the high priest, is returning his large sword into the scabbard.

The other is a marvellous conception of the

combat between David and Goliath, and has below the following inscription:—

"Funda David dedit lapidem quo stringitur hostis.
Virgo Deum fudit quo malus hostis obit."

which has been rendered in English:

"'Twas David's sling sent forth the stone
That laid Goliath low;
A Virgin Mother bore the God
Who slew our deadly foe."

One window seems to have commemorated St. John the Baptist, as a panel exists showing the Baptism of Christ.

ST. JOHN'S.

A complete window to the Baptist is at the church of St. John the Evangelist, Micklegate.

of God occupies the central light. The adjoining lights illustrate the birth of St. John, his baptism of Christ, King Herod's Feast, and the beheading of St. John outside a gateway with portcullis. Each side canopy consists of a trefoiled pointed arch under a gable, above which it is arcaded, and is set between buttresses rising into crocketed pinnacles. The central canopy is similar, but without the upper portion.

The rectilinear tracery is filled with fourteenth-century glass. The first panel is mutilated, the second contains a figure of St. George in plate armour with tabard, bearing a red cross on a silver ground. He is wearing a basinet with camail for defending the throat and neck, his vizor is raised. He is standing on a red dragon which he spears.

The two middle panels depict the Coronation of the Virgin; in one is the Virgin crowned and seated, and in the other is Our Lord enthroned and giving His Benediction. The next panel has been St. Christopher carrying the Infant Saviour; his legs and staff are in wavy water containing a fish which is rising to the surface. The end light depicts the Archangel St. Michael with golden wings, and thrusting a crozier into the mouth of a red dragon on which he is standing. Underneath the two central lights are shields, one bearing the arms of the city and the other that of Neville.

The four-light window (Fig. 5) at the east end of the north aisle has its earliest glass in the base. Each compartment has husband and wife praying, their names being inscribed below, and they are Richard Briggenhall and Katherine his wife; John Randman and Johanna his wife; Richard Toller and his wife Isabella, and William Grafton and Agnes his wife. The Tollers kneel before an altar with a priest officiating, whilst the Grafton inscription has gone.

The remaining glass with tracery commemorates Sir Richard Yorke, who was Mayor of the Staple at Calais, and Lord Mayor of York in 1469 and 1482, and Member of Parliament for York.

In the tracery are eight angels supporting shields bearing the arms of the Merchants of the Wool Staple at Calais, the City of York, and Sir Richard Yorke; there are also

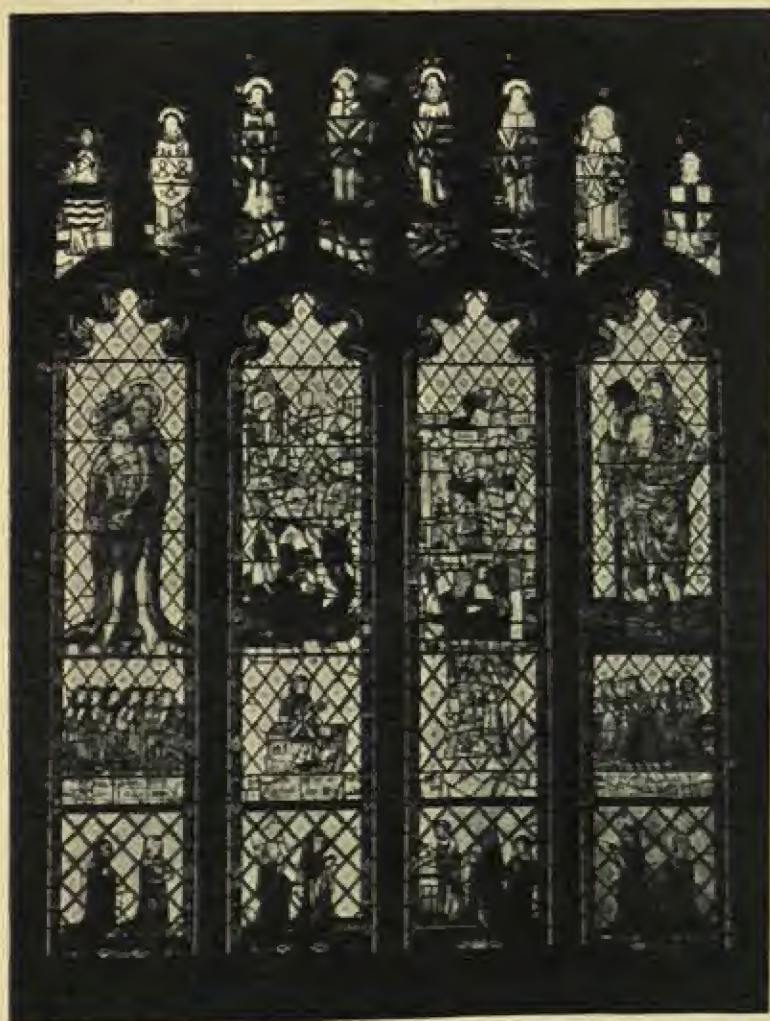


FIG. 5.—ST. JOHN'S.

This fourteenth-century glass has been mutilated by being thrust into a fifteenth-century window. A figure of the Saint with disc bearing the Lamb



FIG. 6.—ST. JOHN'S.

impaled shields showing his connection with the Darcy, Mauleverer, and other families. Across the lower part of the window Sir Richard Yorke is shown kneeling before an altar. He is in armour and tabard, bearing *azure a saltire argent*. The adjoining panel probably contained a figure of Lady Yorke; it, however, contains a representation of the Trinity (Fig. 6) as Our Father in Pity. The Father exhibits His Son on the Cross, whilst the Holy Spirit in the form of a Dove is shown near the crown of thorns. This is the usual way of depicting the Trinity in the York churches. The outer lights show six sons and four daughters of Sir Richard Yorke at prayer.

The large figures at the top of the window have no canopies. The figures represented are the Trinity, St. George (mutilated), the Crucifixion (mutilated), and St. Christopher.

HOLY TRINITY, GOODRAMGATE.

An earlier window with similar figures, but under short canopies, is at the Church of the Holy Trinity in Goodramgate. It is a five-light window (Fig. 7), and depicts St. George, St. John the Baptist, the Holy Trinity, St. John the Evangelist, and St. Christopher. The latter was the giant Offera, who



FIG. 7.—HOLY TRINITY, GOODRAMGATE: EAST WINDOW.

having carried the child Christ over a river was afterwards known as Christopher—so the legend says.

Below the figures are subjects, three of which are extremely interesting, for they accord with the tradition that Anne, the mother of the Virgin Mary, was thrice married; Joachim being her third husband. The two others were Cleophas and Salomé. By Cleophas she had a daughter also called Mary, who became the wife of Alphæus and the mother of Thaddeus, Simon, James the Less, and Joseph Justus. By her second husband she had a daughter also named Mary, who married Zebedee, and became the mother of James the Great and St. John the Evangelist. All these children were, according to the tradition, cousins of Our Lord, and grandchildren of St. Anne, the mother of the Virgin.

Another panel shows St. Ursula holding a barbed arrow; her cloak is open and covers a number of small figures, including a Pope, a King, and Virgins. The legend is "that on the return from Rome of Ursula and her eleven thousand virgins with Pope Cyriacus and her suitor Conon, King of Britain, they encountered at Cologne an army of pagan Huns, who slew the whole party except Ursula. Their King wished to marry Ursula, but on her refusal he raised his bow and shot her with an arrow."

As in the window at St. John's, there is a second representation of the Trinity, but in this case the treatment is entirely different. There are three bearded persons crowned and seated. The crown of Christ is encircled by a wreath of thorns, and His undergarment, which shows drops of blood, is continued across the knees of the other two persons of the Trinity. The Blessed Virgin stands in front.

There are shields at the top of the three middle lights, one being that of Kempe, who was Archbishop of York, and another that of the See impaling Kempe.

A Latin inscription crosses the five lights, and may be rendered in English "Have mercy on the soul of John Walker, Rector. He caused to be made this house and window in the chancel of the Deity, without contention, in the year 1470. To Thy honour, O King."

The two-light window in the north aisle has vesica panels, two with representations of the Blessed Virgin, one as the Queen of Heaven; there is also a figure of the Saint of York.

The corresponding window in the south aisle depicts Bishop Paulinus and St. Olaf, King of Norway, to whom one of the York churches is dedicated.

There are shields of the Edwardian period, namely, the Plantagenet lions of England, Provence (Eleanor, Queen of Henry III.), and of the noble families of Ros, Vere, Percy, Mowbray, and Latimer.

ST. MICHAEL, SPURRIERGATE.

At this church the central lights of a four-light window are filled with white glass enriched with yellow. There are eight panels filled with the Nine Choirs of Angels, comprising Cherubim, Seraphim, Thrones, Dominations, Virtues, Powers, Principalities, Archangels, and Angels.

The subjects from the top are:—Eastern light: 1. Three naked females, the central one with arms crossed, the lower parts of their bodies are amidst flames. 2. Three Kings, the central one holding scales. 3. Three Kings in plate armour with coronets around basinets, the central one with sword upright. 4. Three winged males with curly hair, and each wearing a skull-cap with a spike. Western light: 5. Three feathered angels standing, the outer ones holding books. 6. Three winged females with the cross on their foreheads. 7. Three winged warriors in plate armour with camail and basinets, one with shield bearing a white rose. 8. Archangel and angels, the middle one with trumpet.

The central lights of the next two windows each contain eight panels of a Jesse or Genealogy of Our Lord. It has been a beautiful window, having the figures set amidst a design formed of the leaf and fruit of the Vine. The figures include St. Mary with the Infant Jesus, King David, and the Prophet Isaiah.

A five-light window has medallions with subjects in a neutral tint, of which one is of the Coronation of the Blessed Virgin, and another the Trinity as Our Father in Pity. There is a similar window in the corresponding aisle. The aisle windows at the east end have interesting fragments.

ST. MARY, CASTLEGATE.

At St. Mary's, Castlegate, in the east window of the south aisle is a fine head of Our Lord (Fig. 8). There are under canopies single figures of St. John,



FIG. 8.—ST. MARY, CASTLEGATE.

an Archbishop, and St. James. The lower part of the canopy shafting is gold with a black chequy pattern, which is common in York work of the early fourteenth century. Below are two crowned monograms, MR and IHC.

In the tracery is a shield with a Merchant's mark.

ST. MARY, BISHOPHILL, JUNIOR.

In the tracery of a north aisle window at St. Mary's, Bishophill, Junior, is depicted the Assumption of the Virgin and St. Michael the Archangel weighing souls.

ST. MICHAEL-LE-BELFRY.

The east window at St. Michael-le-Belfry has five lights with tall canopies. Amongst the subjects are the Annunciation, Nativity, and Resurrection. Under a double arcade are figures of St. Peter with a model of a church and the keys, and a Saint holding a clasped book.

The four-light window in the north aisle has large figures of the patron Saint, St. Michael, bearing a white cross on a red ground. He holds a sword behind his neck, and is ready to strike the dragon. The other figures are St. Christopher, St. Ursula, and the Blessed Virgin.

The four panels in the base are considered by Dr. Gayner to have been brought from the Netherlands, and to depict one of the deadly sins, that of adultery. There is represented a wedding by a Bishop, the anointing of the woman by the bishop, another man embracing the woman, and the same man in fetters being taken to prison.

In the north aisle windows are figures of St. Peter, St. Paul, St. John, St. Wilfrid, St. Hugh, St. William, St. George, and St. Christopher.

ST. SAVIOUR'S.

The east window is of five lights with rectilinear tracery. Each light has contained three subjects under canopies. The canopy consists of three foliated arches, over the central one of which rises a short crocketed spire within an octagonal embattled parapet, and over the side arches rise embattled pinnacles with spirelets. Amongst the subjects are:—Nailing Jesus to the Cross, The Crucifixion, Taking down the Cross, Laying out the Body of Jesus for burial, The Resurrection (mutilated), The doubting Thomas and Jesus and the Ascension. The other panels are fragmentary: in one Jesus is shown wearing the Crown of Thorns, and there is also a shield bearing the emblems of the Passion.

In the tracery are figures (mutilated) and archangels with trumpets.

The tracery in the east windows of the aisles

contains fragments with medallions enclosing crossed swords.

ST. HELEN'S.

The west window, of four lights, has large figures (mutilated) under canopies. The canopy consists of a crocketed gable enclosing a trefoil and cinquefoil. In the base are small figure panels, the central ones having a single figure under a canopy. The northern one has two figures, and also a shield bearing the letters R.L.E. The border has crowns alternating with interlaced panels. In that of the southern light lions occur.

In the north-west window is a figure wearing a wig and habited in a blue coat.

There are a few shields: a quartered one bears the arms of Percy and Lucy.

ST. CUTHBERT'S.

In the windows are a number of shields, including that of the City of York. A figure of a man pouring liquid into jars may be a fragment of a panel illustrating the miracle at the Wedding at Cana. The window borders are made up of fragments.

QUARRIES.

There are a number of diamond-shaped pieces of glass bearing devices: these are known as quarries. The late Rev. George Rowe made drawings of a large number. At St. Martin's, Micklegate, is to be found the White Boar of Richard III., and the same window has the "three white daisies growing on a turf," an emblem assigned to Lady Margaret, Countess of Richmond and mother of Henry VII., who defeated the owner of the "White Boar" badge at Bosworth Field. On windows in other churches are depicted such curious and varied subjects as a wren playing a harp, a nutcracker playing a pipe, a cock crowing, a woodcock catching a fly, a crane, hawk, starling, hoopoe, goose, parrot, green plover, peacock, swan, and a nightingale or thrush playing a kind of violin. Another depicts a fallow deer. There are many floral designs, which include the oak and its fruit. A floral cross with ribbon is interesting, as it contains a text in English when almost all were in Latin.

In conclusion, attention has been called to a remarkable series of glass paintings in the York churches which remind us of the time when art was loved for its own sake. The windows are valuable for the light they throw on the costumes and customs of mediæval York. They form an essential part of the material available for historical research, and in this respect often furnish more useful information than the MSS. themselves. There is no finer collection of this characteristic product of the art of the middle ages to be found than that at York.

REVIEWS.

INDIAN ARCHITECTURE.

Indian Architecture: its Psychology, Structure, and History from the First Muhammadan Invasion to the present day. By E. B. Havell, Author of "Indian Sculpture and Painting," "The Ideals of Indian Art," &c. With illustrations. 4s. Lond. 1913. 30s. net. [John Murray, Albemarle Street, W.]

It is on record that an Indian official, exasperated by views on construction expressed by an architect, propounded the following conundrum: "Why cannot these architects leave construction alone?" To this gentleman and to others who may share his perplexity, Mr. Havell's *Indian Architecture* should come with less disappointment than to the student expecting from a perusal of the volume an extended knowledge of the building traditions of that country. For the author is of those to whom an architect is but a maker of paper patterns of pretty ornaments and features copied from those adorning the class of building in vogue at the moment, which shall serve as "clothing or architectural garments" for the building upon which he is engaged.

There is something to be said in excuse for this misconception of an architect's aims, by the amateur of buildings whose knowledge of Western architecture has been chiefly gleaned from a perfunctory study of our efforts in India, where our insistence upon one or the other of the recognised styles of architecture has resulted in buildings unsuited alike to our requirements and to the climate. In so far as Mr. Havell's book is directed against this evil his strictures are fully justified; but unhappily his crusade is not against the "Paper Pattern" *per se*, but against those only of which the origin is other than Indian. For the volume is frankly an apotheosis of the Hindu designer and craftsman, expressed for the purpose of demonstrating that it is to these, and to these only, that we must look for improvement in our Indian buildings. The suggestion is in no way novel. For the best part of half a century we have been working on the lines which Mr. Havell advocates, and have strewn India with buildings deliberately designed on native models, drawn by native draughtsmen in whom we have attempted to instil an interest and knowledge of native art, and built by native craftsmen whom we have encouraged to reproduce the works of their forefathers. Such buildings are plentifully scattered throughout the length and breadth of India, presenting for the most part, in addition to the ineptitude of our more Western buildings, a character of cheap vulgarity which finds expression even through the medium of noble materials. For the Indian styles have this in common with our Gothic that they must be interpreted not only by the scholar but by the artist if they are to be other than bizarre;

and designers of buildings in India or elsewhere are not always either the one or the other.

The volume is gracefully presented, and, as a portfolio of some 130 excellent reproductions of photographs of beautiful and interesting Indian buildings, forms a welcome addition to any library. But the letterpress is stultified by a tedious insistence on the fallacy that the excellence to which Indian architecture attained in the past was exclusively the result of development from within, and that its progress was rather in spite of than because of the foreign influences brought to bear upon it. To Buddhist origin and the genius of the Hindu craftsmen, the author attributes all that is admirable in Indian buildings, and in his endeavour to establish this conviction he has robbed his subject of the critical analysis which the title of his work infers.

Mr. Havell sees symbolism in every form and ornament of an Indian building, and in his quest of the lotus petal and pipal leaf he has failed to detect the influences of increased knowledge of building materials and consequent modifications of form of construction. There is no dearth of symbolism in our own ecclesiastical buildings, but it was not symbolism which dictated the massive lines of our Norman churches or the delicate grace of our later Gothic work.

The student of *Indian Architecture* will do well to remember the limitation under which the old Hindu builders laboured, and to trace the development of their methods from the bamboo, mud, and timber structures from which they evolved into expressions carved out of the solid rock and thence into structures of masonry, rich in every expedient that could be devised to replace the arch, but lacking the outlines and forms which a truthful and unprejudiced employment of masonry and brickwork must dictate.

It is ingenious of the author to deduce from the symbolic aura, applied decoratively to carved heads of Buddha, evidence of the knowledge amongst Hindu builders of the arch as a structural feature, but his explanation that they deliberately rejected this form of construction on account of the facilities afforded by their country for the employment of immense stones, is unlikely to convince those who have studied their methods of quarrying. Moreover, the huge brick arch which spans a field near the river at Seringapatam, and was built by a Frenchman for the purpose of demonstrating to the natives the advantages of bridging the river by an arch rather than by piers and lintels, would have been a monstrous work of supererogation for the impressing of knowledge upon those already in possession of it.

For the reasons given above, the outline and structural forms of Hindu buildings are rarely satisfying to the Western eye, which rightly looks for the natural forms of lithic construction in works of stone. But if we cannot wish to reproduce the

Hindu buildings we may at least revel in the glories of their conventional surface ornament, the exquisite refinement and ingenuity of which remain unrivalled throughout the world. No thesis on Indian architecture can adequately serve its purpose that does not emphasise this splendid characteristic of the Hindu work, or record the stultifying effect of the lavishness with which this ornament was employed. For to the Hindu architects the quality of restraint was unknown, and more often than not their buildings are disfigured by an excess of ornament in itself beyond praise.

With the advent of the Moguls early in the sixteenth century, a complete revolution in Indian architecture was effected, since these Mahommedan invaders imported building traditions in startling contrast with those of the country they had conquered—a country sadly in need of the lessons they had to teach.

The chief characteristics of these were:—

1. The liberal and bold employment of the arch.
2. A fine sense of proportion and grouping.
3. A keen appreciation of the value of restraint.
4. A preference for unbroken lines and subtle curves.
5. The enrichment of surfaces with inlay and colour.
6. The employment of the minaret as an integral feature of design.

Mr. Havell's resentment of the term "Indo-Saracenic," as applied to the buildings which followed this revolution, is perplexing, and his contention that they were but the natural result of evolution from the earlier Hindu work is laboured and unconvincing. The Taj owes but little to Hindu tradition, and if whitewashed from pinnacle to plinth would still remain the world's most effective monument to the power of simplicity; but in this respect it is exceptional, since in the vast majority of Indo-Saracenic buildings Hindu methods and influence are greatly to the fore. For these two widely differing schools of architecture borrowed from and reacted upon each other to the immense advantage of both, the Hindu enriching and beautifying the conceptions of the Mahommedan, and absorbing in the process something of his ideals of beauty.*

Although the united efforts of Hindu and Saracenic architects have resulted in buildings the best examples of which are likely to remain unsurpassed in beauty and magnificence, it should be realised that these buildings are lacking in certain qualities essential to the highest expression of architectural genius. The spirit in which they were conceived disregarded the claims of structural

expression, and was forced to rely for effect upon the employment of surface ornament and superimposed features to an extent which Western methods do not necessitate. The lines and groupings of these Indian buildings are dictated less by the requirements of their internal arrangements than by an insistence upon a preconceived external effect. The outline only of an arch is displayed, its voussours and abutments concealed, and it is almost invariably enclosed in a closely fitting square frame, the lines of which are misleading as to the functions it performs. The expression of extra strength, where extra strength is needed, is neglected, and plain wall spaces are avoided. But perhaps the divergence between the methods of Indian architects and our own may best be demonstrated by the fact that to accentuate the structural joints of an Indo-Saracenic building would be to disfigure it, while the repression of these in our own structures detracts from their beauty.

In these circumstances it is at least debatable whether the cause of Anglo-Indian architecture can be served with advantage by following Mr. Havell's advice. The illustrations which figure in his book of modern Indian buildings are not encouraging to those who look for something more than mere prettiness and fanciful elaboration in buildings. Architecture is of stiffer stuff than these, and it is by insisting on sound principles rather than on any "paper patterns" that we may hope for better things. In any case it is a fact of the utmost significance that, had the Mahommedan and Hindu builders insisted on maintaining the purity of their respective styles, the magnificent monuments which are the result of their combined traditions could never have been achieved.

It is not sufficiently recognised that architectural progress is mainly the result of altered conditions in materials, climate, or mode of living, and that the most formidable obstacle opposing this progress is a prejudice in favour of standards of beauty based on conditions which have ceased to exist. Any prolonged period of absolutely unaltered conditions should ultimately result in the reduction of architecture to the science of selection from that which has already been expressed. But in England as in every other country where conditions alter but slowly, a general desire for novelty and originality outstrips the natural progress of architecture and periodically results in decadence. The reaction from this decadence is a return to the simpler and more truthful methods which preceded it, and for this reason the best of our modern buildings are but the scholarly adaptations of an artist. The lack of any real call for the exercise of actual invention has therefore rightly resulted in the habit of employing that which has been established; a habit so confirmed that when, as in India, we are confronted with entirely altered conditions in materials, climate, and mode of living, we fail

* A striking example of the refining influence of these ideals lies in the evolution of the invaluable Indo-Saracenic Chajja, or sloping alab cornice, from its ungainly curvilinear Hindu prototype.

to understand that we are in circumstances which call for the utmost exercise of our ingenuity, and we waste considerably over a century in the futile endeavour to fit every variety of ready-made square peg into a round hole.

That Mr. Havell's peg is as palpably square as any of the others has been sufficiently demonstrated, and his suggestion that India's new capital should be the work of "the native master builder, with his craftsmen working in accustomed materials upon the site from simple instructions as to accommodation and arrangement," may be dismissed. We have much to learn from Indian methods of building, and much to teach to those who practise them. These are reasons why we should cease from posing either as deprecating dunces or blatant pedagogues, and should hasten to acquire and practise the knowledge which we lack, and to disseminate that which we possess. It is in this latter spirit that all architecture has been evolved, and without it the golden opportunities which India offers for the development of its distinctive type of building under British rule must continue to be squandered.

JAMES RANSOME [F.].

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STRUCTURES: THEORY AND DESIGN.

The Theory and Design of Structures: A Text-book for the Use of Students, Draughtsmen, and Engineers engaged in Constructional Work. By Ewart S. Andrews, B.Sc. 80. Lond. 1913. 9s. net. [Chapman & Hall, Ltd., 11 Henrietta Street, Covent Garden.]

There is in these volumes a large amount of most interesting matter covering structures in brick, stone, steel, and concrete, and, generally speaking, the work is distinctly good, but the diagrams are not so clear as they might be and the lettering of them is not in all cases complete.

In the first volume, page 44, Table of Working Stresses, the general heading "Working Stress in Tons" is misleading, as the units of stress are respectively tons per square inch, hundredweights per square inch, pounds per square inch, and tons per square foot. The author gives here a compressive working stress for mild steel of 6 tons per square inch as against 7 tons in tension, which is unusual, no reason being given. Again, he gives a tensile working stress in timber of 3 cwt. per square inch as against 6 cwt. in compression, though timber is considerably stronger in tension than in compression. Rankine gives 1,000 lb. per square inch, or about 9 cwt., for the compressive working stress, and this is quite safe in pure compression. The working compressive bending stress in timber joists is frequently and generally as high as 16 cwt. to 18 cwt. per square inch.

The question of wind pressure is fully dealt with, as far as authorities are to be quoted, but one feels that there is still much more to be done before we have reliable data on this subject.

On page 87 the author gives an approximate method of obtaining the moment of inertia of built-up sections, and on page 174 an approximate method of obtaining the modulus of ω sections. Such approximate methods are rather out of place in such a work.

Page 89.—The author states here that the material required to form the snap heads of rivets is equivalent to a length of rivet $1\frac{1}{2}$ times the diameter of the rivet shank. The allowance for forming the head will vary with the number of thicknesses to be riveted, and is seldom less and generally more than $1\frac{1}{2}$ times the diameter of the shank.

Page 95, fig. 46.—The author here shows 1-inch diameter rivets $2\frac{1}{2}$ -inch pitch on line and $1\frac{1}{2}$ inch from centre of butt-joint. This pitch is closer than is allowed under the London Building Act, and closer than is generally desirable. Further, the nett section of the bar here is (9 inch $-1\frac{1}{16}$ inch) $1\frac{1}{4}$ inch, as holes for 1-inch diameter rivets are drilled $\frac{1}{16}$ inch larger than the nominal diameter. In contrast with the above figure we have, on page 97, $\frac{3}{4}$ -inch diameter rivets 3-inch pitch, and, on page 98, $\frac{3}{4}$ -inch diameter rivets $3\frac{1}{2}$ -inch pitch. As these diagrams are for students they should be models of consistency in detail.

Page 204.—The letters C B referred to in text, fig. 3, cannot be found in the diagram.

The question of deflection of beams under various conditions of loading and support is fully gone into both graphically and mathematically, and this will be found most useful by the student.

Pages 243 and 244.—The author here introduces somewhat doubtful matter on the fixing of the ends of beams by cleats bolted or riveted to other parts of the structure. Cleats are usually too light and elastic to be of any material value in this way, and the tension on bolts or rivets of various degrees of tightness is not to be depended upon. Beams depending upon such *fixing* are not sound, and the writer thinks that if the author will investigate this matter a little further he will delete this item. This question appears again on page 488.

Pages 240 and 263.—The advantages and disadvantages of fixed beams and of continuous beams might well be combined in one paragraph. Strictly speaking, there are no truly *fixed* or built-in ends, as no non-elastic material exists to encase the ends of the beams. We have continuous ends of beams where the loading on the second span is sufficient to keep the axis of the beam horizontal over the point of support.

Page 319.—Vertical Members treated by the Method of Sections: May we take it that "it" refers to the plane of section and not to the vertical member?

Page 337.—Euler's Formula (a).—What do the symbols K and C represent here? This does not seem quite clear.

In dealing with reinforced concrete the author

points out that the question of the Modulus of Elasticity is very important, and shows that when the steel reaches its elastic limit a sudden stress comes on to the concrete. The author states here that in San Francisco the stress on the steel in such structures is now fixed at one-third of the elastic limit of that material, which is a very wise provision. The regulations here allow a stress of 16,000 lb. per square inch, nearly half the yield stress and considerably more than half of the true elastic limit.

Page 476.—The general remarks here as to the design of cast-iron stanchion bases are vague and in their present state better omitted.

Page 488.—The author recommends that the deflection of girders in buildings should not exceed $\frac{3}{16}$ of the span. Such deflections are rather alarming in appearance in long spans, and would cause cracking of casings, &c. A deflection of $\frac{1}{16}$ of the span is given in the London Building Act and is a much better general figure, and a higher limit still is advisable for girders carrying stone-faced walls.

Page 488.—The author gives the usual camber in girders as $\frac{1}{4}$ inch in 10 feet. The camber of $\frac{1}{4}$ inch in 10 feet referred to on page 528 is better and usual. The camber will not obviate the additional stress due to the curve of the road. The rails are packed for this.

Page 530.—One cannot understand why the whole of the nett-section of the main angles should not be included in the area of the boom; see also page 534, fig. 262. Plate girders are not usually designed in this way, but from the moment of resistance of the whole section, which is worked out as exactly as possible.

Page 533.—Again, why should we not deduct the area of the rivet-holes in the compression flange? The holes are not solid when the rivets have cooled.

Generally in this volume it is to be regretted that the detailed examples shown are so little worthy of the text. We find illustrations copied from the lists of various manufacturers which are not sound in detail. The grillage beams on page 482 want rearranging, and the angles want riveting to the gusset-plates of the stanchions, and the stiffeners to the grillage beams should be under the load.

We have on page 491 a detail of gantry girder for a 45-ton traveller, say 35 tons or more on one girder, where the load has to travel from the rail through one $\frac{1}{2}$ -inch flange-plate to the webs. The depth of this girder is given in text as 5 inches and the web has "5 inch \times 3 inch \times $\frac{1}{4}$ inch; Tee stiffeners." It is unusual to find $\frac{1}{4}$ -inch webs in such a girder.

On pages 502, 503, 505, and 506 in details given we have examples of how the thrust of the rafter and the pull of the tie do not meet in one point and

balance the reaction of the support. Better examples should be given after so much has been said of secondary stresses.

Generally there are too many names of manufacturers given in the book. These names should be altogether omitted or should all be given. A page might be filled with names of makers of trough-flooring alone. One name only appears; why not treat them all alike?

The second volume deals exhaustively and well with the stresses in structures of various kinds and influence lines therefor. The deflections of framed structures are also carefully investigated here, both graphically and analytically. Arched ribs and trusses of the various kinds generally met with are also treated here, and special consideration is given to the stresses in portal bracing under various conditions of loading and of wind pressure.

The matter in Chapter X. referring to secondary stresses in framed structures due to eccentric rivet connections is good and illuminating in many particulars, but the author hardly seems to appreciate the fact that so long as the centres of gravity and lines of action of the various members of a truss intersect, the position of the rivets does not necessarily produce eccentric stresses in the members where there is more than one rivet in each member, though there will be bending stresses in the gusset-plates. The author's remarks are quite true in pin-jointed work, which, however, is not represented in the figures given.

Fig. 92 (a) is bad design, and so also is fig. 92 (b). In fig. 93, described as representing a roof-truss shoe without secondary stresses, there would be secondary stresses both in the rafter-back and in the tie-bar.

The writer would also commend the matter dealing with stresses in angle cleats and in their riveting to the student.

One feels tempted to add a few diagrams here illustrating these points, but this seems to be going beyond the province of a review.

FRANK N. JACKSON,
Assoc.M.Inst.C.E. [Hon.A.].

Books Received.

The Evolution of Architectural Ornament. By G. A. T. Middleton [A.]. 8s. 4s. Lond. 1913. 21s. net. [Francis Griffiths, 34 Maiden Lane, Strand.]

Architectural and Building Construction Plates. Part I. Thirty Drawings covering an Elementary Course for Architectural and Building Students. By Walter R. Jaggard [A.]. 6s. Cambridge. 1913. 6s. net, or in 6 parts, 1s. 3d. each net. [Cambridge University Press, Fetter Lane, E.C.]

What is Music? A Brief Analysis for the General Reader By H. Heathcote Statham, author of "My Thoughts on Music and Musicians," "The Organ and its Place in Musical Art," &c. 8s. Lond. 1913. 3s. 6d. net. [Chatto & Windus.]



9 CONDUIT STREET, LONDON, W., 8th November 1913.

CHRONICLE.

The Opening Meeting of the Session.

A large and distinguished company assembled at the Institute on Monday, the 3rd November, to hear the President's Address at the opening meeting of the new Session. The Council had entertained at dinner, at the Café Royal, Regent Street, the same evening, Lord Milner, Mr. Cyril Cobb, Chairman of the London County Council, Sir Hercules Read, President of the Society of Antiquaries, Sir George Frampton, R.A., Mr. George Clausen, R.A., Mr. J. Seymour Lucas, R.A., and Mr. Basil Champneys, Royal Gold Medallist. All these gentlemen afterwards came on to the meeting at Conduit Street. Past Presidents of the Institute present included Sir Aston Webb, R.A., Sir Ernest George, A.R.A., and Mr. Leonard Stokes. As usual on these occasions the Institute was honoured by the presence of a large company of ladies, who were accommodated on the front benches. The President had a sympathetic and very appreciative audience. The Address was frequently and warmly applauded, and the vote of thanks was passed with the greatest enthusiasm.

The Ancient Monuments Board.

In the last number of the JOURNAL [p. 746] particulars were given of the Advisory Boards to be appointed by the Commissioners of His Majesty's Works under the recently passed Ancient Monuments Consolidation and Amendment Act. The bodies to be represented on the Boards include the Royal Institute of British Architects, the Royal Academy, the Societies of Antiquaries of London and Scotland, the Trustees of the British Museum, and the Royal Commissions on Historic Monuments in England, Scotland, and Wales. The Council, having received an application from the Office of Works to submit to the First Commissioner the name of the member by whom the Institute would wish to be represented on the Board for England, have nominated the President, Mr. Reginald Blomfield, A.R.A., for the position. The appointment will be for a term of five years.

The Architectural Improvement of London.

The October number of the *Edinburgh Review* has an article by Mr. H. Heathcote Statham [F.] on "The Architectural Improvement of London." Taking for his text the First Annual Report of the London Society 1912-1913, the author discusses a few of the many serious mistakes which have been made in public works in London—mistakes which cannot be undone, and which, as he says, remain as permanent monuments of incapacity which cannot be got rid of. Mr. Statham maintains that schemes for London improvements should be criticised and checked before they are permanently imposed on us. In France any public work on a large scale, if promoted by the State, must have the approval of the Ministère des Beaux-Arts; if a metropolitan improvement promoted by the Paris municipality, it must satisfy the Service des Beaux-Arts at the Hôtel-de-Ville. Here in London a street and building improvement appears to be considered only in regard to two points—economy of cost and convenience of street traffic. It is owing to this eternal cry for economy that much of what we do in London public architecture is so small in scale, so deficient in grandeur. The public should be got to realise that an economy which stereotypes an architectural mistake and nullifies an opportunity for adding to the beauty and impressiveness of London is a purely mischievous form of the intermittent zeal of public bodies for the reduction of expenditure. The author considers that the list of names of distinguished artists—painters, sculptors, and architects—who are included in the Council of the London Society ought to be a sufficient guarantee of its competency to advise on questions in which the artistic improvement of London is concerned. In the absence of an official department whose mandate is to deal with public improvements from an architectural point of view, the London Society seeks to give the best advice on such points when invited to do so; to use its influence, even when not invited, to prevent the carrying out of schemes in themselves faulty and undesirable; to prevent the expenditure of money on costly mistakes which cannot afterwards be undone; and, above all, to think out important projects for London improvement, and endeavour to promote their execution. Touching the criticism which has been made that a Society with these aims is proposing what is an intrusion on the province of the bodies who are formally and officially concerned with the treatment of London, Mr. Statham says:—

The answer is, in the first place, that these bodies have shown experimentally either that they do not understand the subject of architectural improvement or that they are indifferent to it. . . . The more important reply is that neither the State nor Municipal departments, so far as they deal with public architecture, have any right to consider that London architecture is their property *pro tem.* to do what they like with. They are not owners of

London; they are trustees, with a duty both to the present and to future generations. The architectural improvement of London is the concern of every intelligent and educated Londoner, and the departments which actuate the official machinery for dealing with it are responsible to the educated public, who may now be said to be adequately represented by the London Society. But both in State and Municipal departments a policy of secrecy is kept up in regard to all projected improvements; the desire seems to be to prevent the public knowing anything about what is proposed until it is too late to interfere; the object, with the Municipal bodies, being apparently not to discover and to do what is best, but simply to have their own way, in a dull and obstinate defiance of all outside opinion.

Dealing with some of the new problems in London improvement, Mr. Statham gives his views, illustrated by plans, as to the more effective treatment than that which the authorities propose for the new Post Office site in the city. With regard to Lambeth Bridge, he gives a plan showing that the bridge is on the line of the shortest and most direct route between Victoria Station and the Tower Bridge and London Docks, and that considerably more than half of the street route already exists and only requires linking up by two stretches of new street. This the author thinks will almost certainly be done some day, with the result that there will be a great stream of traffic along that route, which forms the chord of the great arc swept by the Thames between those two points. Lambeth Bridge would then be one of the most important on the river, and should be designed and constructed accordingly.

The London Society and its Work.

The vitality of the London Society is further manifested by the appearance of the first number of a new periodical which is to be published monthly under the title of *The Journal of the London Society*. Its purpose is to render a periodical account of the work of the Society, so that its members may be brought more directly into touch with what is being done than is possible by the mere issue of an annual report. The Journal is under the joint editorship of the past Secretary, Mr. H. J. Leaning, and Mr. Percy W. Lovell [A.], the present Secretary.

Some representations made by the Society respecting the Regent's Quadrant in a letter to the Press have drawn a definite and very satisfactory pronouncement from the Commissioners of Woods and Forests which is now made public by the Commissioners' consent in the Journal under notice. In a communication to the Society made at the direction of Mr. Leveson Gower, it is stated that "there is no intention of allowing any rebuilding in the Quadrant until a comprehensive design for the whole Quadrant has been settled, and to this design all rebuilding schemes will have to conform. The designs, which it was stated in Parliament would receive careful consideration, must of course comprise the whole of the Quadrant

other than that portion which has already been rebuilt in accordance with the late Mr. Norman Shaw's design, and not merely the premises of any particular shopkeeper for whom the architect might be acting."

The magnitude of the tasks the London Society has set itself is shown in the Reports of Committees which find place in the Journal. These Committees are already well at work. They include (1) The Streets and Buildings Committee (assisted by Sub-Committees throughout the Metropolitan Boroughs), which has to keep an eye on all suggested improvements, demolitions, &c., and to report at once when they feel that action by the London Society would be desirable and efficacious (Chairman, Mr. Edwin T. Hall [F.]; Hon. Sec., Mr. Horace Cubitt [A.]); (2) The South Side Committee, which has been entrusted with the consideration of the problems affecting the future development of the Surrey side of the Thames (Chairman, Mr. Paul Waterhouse [F.]); (3) Group No. 3 of the Local Committees (Chairman, Mr. W. H. Davison; Hon. Sec., Mr. Maurice Webb); and (4) The Open Spaces Committee (Chairman, Mr. Raymond Unwin). The last-named Committee is engaged on the compilation of a comprehensive survey, first of existing open spaces, distinguishing those already dedicated to public use and those under private control (including tennis, golf, cricket grounds, &c.). This Committee is also to prepare a careful schedule of all open spaces around London that might in the public interest be secured for all time, such as river-banks, marshes, inaccessible plots, hill-sides, and any points of vantage or beauty spots. This work, it is felt, will be of immense assistance to local authorities entrusted with the task of preparing town-planning schemes in Greater London.

Besides recording the Society's Transactions, the Journal has an article by Mr. H. Mulford Robinson telling how London impresses an American. The author seeks to awaken the citizens of London to a sense of their responsibilities:

We who journey to London from the various corners of the earth are impressed, he says, by the city's power. Rightly or wrongly, we translate this power into an ability to do. If London does not do a thing, it does not occur to us provincials from over the sea that she cannot do it. We suppose that she deems the performance inadvisable. Again, we are impressed, as I have said, by the city's age, coming as we do from towns that were born when she was old. If London does not do a thing well, it does not occur to us that she doesn't know how or has lacked the time. We suppose that in her experience-gained wisdom she does not desire to do it in other fashion than she has.

You build a new street from Holborn to the Strand, and we talk about it around the world and dare to build new streets. You fork the thoroughfare at one end in order that an ancient church may not be sacrificed, and thereby historic associations and beauty of design are raised in the estimation of distant peoples and made safer from the onslaughts of iconoclasts. You permit railroads to disfigure with hideous and outworn construction splendid parts of

the city, and the heart and the courage goes out of those who might else have supported the efforts to ameliorate like conditions in other cities. You impress us with the vastness of London, with its interminable built up areas, and we let our own cities grow in ceaseless concentric rings of squalor, for have we not the right to suppose that London—old, experienced, and of a seemingly incalculable power—illustrates the only practical way in which a huge city can be built?

Of great moment, then, to the world is the way you build your London. Inspiring and tremendous is the opportunity and the obligation of the world's metropolis. No doubt we expect too much, no doubt we are unreasonable, but remember that in London a multitude of diverse emotions sweep upon us, that a thousand avenues of thought invite us, that assailing us on every side are strangely appealing sense impressions and mental stimulations, out of the mass of which we perceive dimly power and age and vastness. We have not time to sit down and think. A taxi whirls us over the Holborn Viaduct—and this, we say to ourselves, is the physical solution of the cross traffic problem by the world's greatest city; electric signs flash in our eyes from roof and shop front, or, seeing flamboyant new constructions intrude upon quiet and dignified old squares, we carry home the message that a big city considers business only. It is true that we do not always criticise or always admire what we see in London; but by our actions we admit the tremendous weight of the precedents which are thus established. There are instances in which we know that we have builded better than London, but as examples our achievements are weak while yours are mighty. We realise, more fully perhaps than you do, that where London is brave, the world of cities is brave; and that where London shrinks, faint-heartedness leaps from capital to capital.

Thus the cities of the world sit at the feet of London. In the East End's hollow cheeks and tear-dimmed eyes they read acceptingly the fact of poverty; in the flash and glitter of the West End, its display and stately spaciousness, they see the antithesis of city life, and accept them as conditions that are necessary. You give us our civic religion, an urban sociology which the untrained mass of men in hasty judgment assume, with infinite pathos, to be as good as is practicable.

Oh, you who love London, look for a brief moment beyond the dreariness of your own East End and the wealth and glory of your city, to behold the eyes of the world fixed with hope and aspiration upon you. Realise that when you stand still progress everywhere is checked; that as you progress, all cities are able to move forward. If it is worth while to know how London impresses a foreigner, it is because the example of London is fraught with potency in all cities of men. "He who makes the city makes the world," said Drummond. Of London this is true as of no other city.

Suppose for the moment that it were feasible to surround London with a band of rural parks—a circuit of Hampstead Heaths, as it were, something like the "agricultural belt" of the Garden City—and that beyond this reserved band of green the city could spread by the creation of only encircling towns, each a unit in itself, like the Hampstead Garden Suburb, do you not believe that many cities of many lands would follow the example thus provided? Do you not think that municipal life throughout the world would be rendered better and safer by the bounds that would be set to indefinite urban expansion because you had shown us how? Or suppose that one or more great radial highways were constructed, magnificent in scale, with rapid transit provision, avenues of different kinds of surface traffic and space for adornment, do you not foresee that other cities would gain the courage to make their surrounding lands readily accessible by such means? Sup-

pose there were town-planning of the metropolitan district, what might not town-planning thenceforth attempt? Or suppose, finally, that in this huge and complex city, with its many separate units, there were unification and consequent comprehensiveness of action—the "common life for a noble aim" of which Aristotle spoke as the ideal of cities. If you can locally bring about so great a victory as that, think how we all shall be profited.

Finally, there is a Paper entitled "Squalid London and the Indifferent Londoner," by Mr. Somers Clarke, who takes his readers for a walk from Kensington Palace to Charing Cross, and points out the many examples of slatternly neglect characteristic, not only of the public authorities, but of the people in general—for if the people really cared about such things, the blunders here called attention to would never have been made.

The Broad Walk, Kensington Gardens.

Two members of the London Society (who wish to remain anonymous) have offered a Prize of a Gold Medal and £15, to be competed for by architectural students, for the best scheme for laying out both the north and south ends of the Broad Walk, Kensington Gardens. It is suggested that the scheme should include handsome gates, and that one end should be emblematical of the Progress of the reign of Queen Victoria, and the other of the efforts of King Edward VII. in the cause of Peace.

The Council of the Royal Institute, having been asked to co-operate with the London Society in organising the Competition, have referred the matter to a Committee consisting of members of the R.I.B.A. who are also members of the Council of the London Society. This Committee has now been appointed to make all necessary arrangements, and the award of the Prize will be in their hands. Full particulars will be shortly announced.

A Triumph of Organisation.

The President in his address last Monday, when touching on the relations which exist between the modern architect and his workmen [pp. 2-3], interjected a reference to, and fully endorsed, the high tribute paid by Sir Aston Webb to the workmen who had been employed in carrying out his designs for the Mall front of Buckingham Palace. The work, said Sir Aston, was done by the finest body of British masons and labourers that could be had. *The Times*, referring to this compliment in its Engineering Supplement of the 6th inst., says:—

When the general scope and character of the masonry operations involved in the new frontage are considered, and when the limitations of time and the restrictions necessitated by the requirements of the Court are taken into account, the undertaking as now completed by the contractors fully deserves that praise of this kind should be given by one so competent to judge of excellence in the craft of masonry. The work brings the methods of the builder more closely into line with the methods of the engineer than anything that has yet been attempted upon a similar scale, where exceptional artistic effect has to

crown a series of building operations so largely mechanical. It could be accomplished only by accurate measurements followed by precise working, making use of all the aids that the engineer has placed in the hands of the builder, and in such circumstances the danger must always be that the ease may show through the canvas, and that the charm of hand-wrought effect may be lost. The truth is, however, that the best work at each advancing age gains new merits compensating at least in part for what is lost, and it is an encouraging factor in modern masonry that at its best it acquires pleasing characteristics notwithstanding its mechanical origin. The operations at Buckingham Palace were facilitated by modern methods in a variety of ways. The scaffolding was held together by clamps instead of ropes, travelling cradles and lifts worked by electric motors replaced ladders and hods, and throughout the work the windows were provided with carefully fitted iron shields, so that no glass whatever was broken. Considering that the whole work involved the use of 5,757 tons of blocks supplied from the Portland quarries, it is remarkable that only two weeks were necessary for the erection of the scaffold, and that six weeks sufficed for fixing the main portion of the stone.

Imperial Delhi.

Mr. Edwin Lutyens, A.R.A. [F.], and Mr. Herbert Baker [F.], the architects selected by the Government of India to prepare designs for the more important buildings in the new Imperial capital and to act generally as its principal architectural advisers, are leaving London next week for Delhi. *The Times* states that the designs they have had in preparation for some time past will then be discussed with the Viceroy and final decisions may be expected. Offices for them and for the engineering staff have been built on the Rasina hill, in proximity to the central point where Government House, the Council Chamber, and the large blocks of secretariats are to be erected. Sir Swinton Jacob, who was appointed in January last to assist Messrs. Lutyens and Baker and to furnish advice as to Indian materials and the employment where possible of Indian craftsmen, has resigned on the ground that at his age he prefers to be free of official responsibilities, but he will be in India this cold weather, and has undertaken to give honorary advice and co-operation. It is the intention of the Government of India to select in his place an Indian master craftsman of architectural experience and repute. It is also proposed that the studio at Delhi for indigenous architectural work should be in Indian hands as far as practicable. Substantial progress has been made since the site was visited by the architects early in the year in levelling areas for building, marking out roads, and other work preliminary to the actual construction of the new capital. Important sanitary improvements are being carried out within the walls of the present Delhi, and the Civil station towards the Ridge has also engaged the attention of the sanitary engineers, while the question of reclaiming the Bela swamps in the vicinity of the Jumna river has been under careful consideration. The decision that the expansion of the modern city should be southwards

beyond the walls from the Ajmere to the Delhi gate has given much satisfaction locally, and many applications have been received for ground for buildings within the prescribed area.

Paris of the Future.

The Paris correspondent of *The Times* gives in the issue of the 28th October some interesting details of a scheme which has been elaborated by M. Delanney, Prefect of the Seine, for the enlargement and development of Paris which would involve almost as great changes as did the renovation of the city by Baron Haussmann under the Second Empire. M. Delanney proposes that the limits of the capital be extended so as to include all the suburbs which cluster round the circuit of the fortifications, and thus to create a "Greater Paris" over six times as large as the present city.

The scheme advises the removal of the inner fortifications which has so long been in contemplation. Their destruction—they have long been dismantled—will remove the barrier which exists between residential and commercial Paris inside the "ceinture" and the dingy industrial quarters which cluster just outside, and will give a tremendous impulse to the growth of the whole city. It is in order to prevent the congestion which would follow, if this development were allowed to proceed unguided, that M. Delanney contemplates the extension of the municipal boundaries to an average distance of about four miles from the present walls, so that the whole vast area may be administered together.

The gist of the scheme is to provide more light and air for the overcrowded population. Paris is inhabited by 148 persons to an acre, compared with 64 in London, and of all the great cities in the world it is the worst provided with urban parks and open spaces. There is no park of any size within the fortifications, and the smaller squares and gardens are few and far between. The largest green patch on the map of Paris is the cemetery of Père Lachaise. M. Delanney proposes in his scheme to make liberal compensation in future for the present state of affairs. He finds the means of obtaining new open spaces in the centre of Paris by the removal of public buildings, such as barracks, hospitals, and markets, to the outskirts of the city. Their place is to be taken by public gardens, and a large part of the present site of the fortifications is to be laid out in the same way. He advocates the application, so far as is possible, of the rule that a house should not be higher than the breadth of the street in front or of the courtyard behind it, and provision is made in the scheme for widening 225 miles of existing roads and for the creation of 50 miles of new ones.

But the most striking of the proposals are those which concern the outer districts of the new Paris. Here M. Delanney suggests that the Government should surrender to the municipality the inner ring of forts which lie round Paris, and that these, with the large areas of land round them, should be reserved as public pleasure grounds. The forts, as he points out, are by virtue of their healthy situation on high ground admirably suited for that purpose. He proposes that besides these enclosures two immense new parks should be created, one to the north and one to the south of Paris, of a total area of about 650 acres. Paris would thus be surrounded by an almost continuous chain of park and garden.

M. Delanney thinks that much of his scheme could be carried out at small expense if the Government will listen to his suggestions and give up for the public use land which is now no longer of any use for military purposes.

Prehistoric Cairns as Road Material.

Professor Baldwin Brown [*Hon. A.*] calls attention in *The Times* to an act of vandalism just committed in an outlying district of Edinburgh. The Professor quotes a paragraph in a recent issue of an important journal which begins as follows:—

“An interesting discovery has been made in the wild and mountainous pass of Drumochter, some three miles to the south of Dalwhinnie, where Glasgow contractors are carrying on operations on that part of the Badenoch District Committee's roads in connection with the Central Road Board grant. The stones in a large cairn close by the Great North Road, between Perth and Inverness, were being utilised for road metalling purposes, and while engaged in removing these stones the workmen, &c. . . . Further operations revealed a stone cist or coffin in the centre of the cairn. . . . The cist was formed of a large rough slab supported by rows of upright stones, suggestive of Pictish origin.”

This precious description, says Professor Baldwin Brown, is headed “Interesting Discovery in the Highlands,” instead of “Disgraceful Act of Vandalism,” and the destruction is reported with the utmost *naïveté* as if it were the most natural operation in the world. The Royal Commission on the Ancient Monuments of Scotland has constantly appealed to public bodies that have the control of the roads to forbid such intolerable acts, and has been constantly assured that orders are given which should make them impossible, yet here is a contractor allowed calmly to destroy to the bottom this notable prehistoric structure, belonging to a class that the Government and the country generally are bent on preserving.

Origin of the Word “Transept.”

The Secretary has received the following letter from Sir James Murray, editor of the *New English Dictionary*:—

Sunnyside, Banbury Road, Oxford:
22nd October 1913.

DEAR SIR,—In the preparation of the Oxford *New English Dictionary*, we have as yet failed to discover the origin and early history of the word “transept.” Our first instance is from Leland's *Itinerary*, 1538–42 (ed. 1907), III. 239, where under Crediton it is stated that a certain tomb is “in the north ‘transept’ of this Church.” This looks as if the term were a well-known word. But we have found no further example for more than 150 years, when Anthony à Wood of Oxford has it (1692) as “transept.” This is a very unusual gap in the history of any word, and naturally gives rise to much speculation. As the field of research is, however, very wide, the word, either in one of its various English spellings, or in a Latin form, may still be found; and we shall be very glad to have the matter brought before the notice of your Institute, in the hope that the members may be interested, and will try to rescue “transept” from the obscurity which at present hangs over its birth and parentage as a mere *fouling* in literature.—Yours very truly,
JAMES A. H. MURRAY.

Members will doubtless be glad to assist Sir James, and the columns of the *JOURNAL* are open to those who are able to throw light on the matter.

British School at Rome: The Henry Jarvis Studentship.

The Council of the Royal Institute of British Architects have awarded the Henry Jarvis Travelling Studentship in Architecture to Mr. Louis de Soissons, Student of the Royal Institute, on the recommendation of the Faculty of Architecture of the British School at Rome. Mr. de Soissons is the first winner of this Studentship, which is open to Associates and Students of the R.I.B.A. under thirty years of age and is of the value of £200 per annum, tenable for two years at the British School at Rome. Mr. Louis de Soissons won the Tite Prize of the Royal Institute in 1912.

The Rome Scholarship in Architecture.

The Royal Commissioners for the Exhibition of 1851 have awarded the Rome Scholarship in Architecture to Mr. Harold Chalton Bradshaw, on the recommendation of the Faculty of Architecture of the British School at Rome. Mr. Bradshaw is the first winner of the Rome Scholarship, which is open to British subjects under thirty years of age, is of the value of £200 per annum, and tenable for three years at the British School at Rome. Mr. Bradshaw, who is in his twenty-first year, is a student of the School of Architecture, Liverpool University. In July last he was awarded the University Certificate in Architecture, which exempts from the R.I.B.A. Intermediate Examination, and he received at the same time the Holt Travelling Studentship of £50. Mr. Bradshaw was placed second and was awarded a Certificate of Hon. Mention in the competition for the Soane Medallion last January. He was the winner of the first of Sir Wm. Lever's prizes in the Liverpool School for a design for a new river-front for Liverpool.

The Herbert Baker Scholarship, 1913.

The Trustees of the Herbert Baker Scholarship announce that, having considered the report of the assessors on the work sent in by the two competitors, and having considered the work, they have decided not to award the scholarship for the present year. The scholarship is of the value of £250, and is open to any British subject who has spent seven years in the study and practice of architecture, who is under thirty-five years of age, and who has spent at least two-thirds of his architectural career in South Africa. The holder is required to spend eight or nine months in Rome as his principal headquarters, acting under the direction of the British School at Rome, this period to include a visit to Athens with the British School there as headquarters. The Trustees express their

regret that the offer of the scholarship has not met with a better response, both as regards the number of candidates and the standard of work sent in. The scholarship was intended to benefit the young architect who has passed the elementary stage of his profession, and is by his own experience learning to understand the difficulty of scholarly design and to feel the need and desire of direct study of the great masterpieces of art. The subject and the conditions prescribed were set with the object of testing the candidates not merely in regard to their technical capacity and power of expression, but also whether they have reached that stage in their architectural education at which a period of study in Italy and Greece would be of benefit to them as architects, and not merely as students of art or archaeology. The Trustees state that the work of the two candidates comes short of the required standard in both respects, while it contains elements of promise which encourage the hope that they will come forward again. It is to be hoped also that other young architects who are ambitious of taking a high place in their profession in the future may seek to profit by the opportunity which this scholarship gives of enlarging their artistic education, even if it may involve some present sacrifice of professional work. The scholarship will be offered again next year, and due notice will be given of the work required of candidates.

Work of the Herbert Baker Scholar 1911.

The Herbert Baker Scholarship, it will be remembered, is administered in Europe by the Royal Institute of British Architects acting in conjunction with the British Schools at Rome and Athens. The following particulars of the work in Europe of Mr. G. Gordon Leith, Scholar for 1911, are extracted from a letter addressed by Mr. Leith from the British School at Athens to the Secretary R.I.B.A. early last summer:—

Before leaving Rome, I sent you a number of the principal drawings and sketches prepared during my stay at the British School of Rome.

Mr. Baker saw my work in January and advised me to finish my reconstruction of the Flavian Palace and leave for Greece. This I have done as far as my financial resources would allow. Unfortunately, I have not been able to thoroughly complete my reconstruction, but am satisfied for the present at having collected all the information that in any way relates to the palace, and at having definitely decided on the design and proportion of the various apartments.

I have written a paper, which you will receive in two or three days' time, which deals with the history, construction, and design of the palace, and in which I give the reasons in support of my reconstruction.

I spent the months of August, September, October, and November in Northern Italy. In Modena I made a measured drawing of a bay of the Cathedral, and measured part of the interior and a tomb. I also visited Parma to see the basalt statues from the Flavian Palace, and made notes on vaulting.

I found a great deal to do in Bologna. I made measured

drawings of the Palaces Bevilacqua and Fava, and spent some time in the Museum, which is filled with the relics of the earlier Roman city.

I visited Mantua, Vicenza, and Padua, and in the latter place measured the pedestal of the equestrian statue of Gontemalata.

I spent six weeks in Verona measuring and plotting all the lesser known works of Sanmichele I could find—the Palaces Murari, Vignola, Lobrecht, and Pompeii. I also made notes on the Roman theatre, and wrote a paper on the architecture of Rome, at the request of Mr. Baker, for the "African Architect."

I visited Garda, S. Virgilio, the Villa Catullus, and Riva. In Venice I chiefly sketched, and in Florence spent most of my time in the Uffizi Gallery and the Archaeological Museum, owing greatly to the cold weather. At the Uffizi I studied the Niobids, examined each statue carefully, made notes, and finally made a drawing on the lines of Cockerell, showing the figures filled to a pediment. This took a great deal of time, but was not a fruitless study, as they will appear in my paper on "Sculpture in Relation to Architecture."

On my way back to Rome, I visited Ferrara, Siena, and Orvieto. Throughout my stay in Italy I have made notes on sculpture and vaulting, and in every possible case have taken measurements of whatever I hope to use in the future.

On my return to South Africa I hope to work among the young students of architecture. I mean to give them my surveys to work out, so that they may become thoroughly acquainted with the "grammar" of architecture before commencing to design.

Eventually I hope to publish my reconstruction of the Flavian Palace, and to illustrate the text with the various drawings and photographs which I have made for that purpose.

I expect to be in Greece until the end of June or July, and to return to London to complete whatever work the Baker Scholarship Committee may wish me to do before I leave for South Africa.

It is due to the courtesy of Commendatore Boni that I have been able to study the Flavian Palace while the excavations were in progress. Following on his advice, I made full-sized drawings of the various mouldings and enrichments brought to the surface during the excavations. I also searched for and identified as many of the scattered fragments as I could find, and, in a way, added the first paragraph to a general work, which Boni called the "grammar" of moulding.

Commendatore Boni has done all he could to help me with my studies, and devoted many moments of his valuable time to my instruction.

In Greece I will write on sculpture in relation to architecture, and, if possible, pull together my notes on vaulting.

Chadwick Public Lectures, London, 1913.

A course of three lectures on House Drainage Law will be delivered by Mr. W. Addington Willis, LL.B., joint author of *Macmorrans and Willis on the Law relating to Sewers and Drains*, on Mondays, 17th November and 24th and 1st December, at 8.15 p.m., in the Institution of Civil Engineers, Great George Street, Westminster, London. The lectures, which will be illustrated by lantern slides, will deal with (a) The Pipe of Dissension; (b) Rights and Responsibilities of Citizens and Councils; (c) The Combined Drainage Problem. Admission is free. Information concerning future

Chadwick Lectures may be obtained of the Secretary, Mrs. Aubrey Richardson, at the offices of the Trust, 8 Dartmouth Street, Westminster.

Victoria and Albert Museum.

The Board of Education announce that the Victoria and Albert Museum will, in future, be open on Sunday afternoons from 2 till 6 p.m. throughout the year, instead of from 2 till 4, 5, 6 or 7, according to season, as hitherto. This arrangement began last Sunday.

An exhibition of Japanese Colour-prints, lent by R. Leicester Harmsworth, Esq., M.P., is now on view in Rooms 71-73 of the Department of Engraving, Illustration and Design, and will remain open until the 21st March next. The collection contains a considerable number of examples of the earlier artists, and is particularly rich in the work of Harunobu, Shunsho, and other eighteenth-century masters; the selection having been made specially to demonstrate the rise, development, and possibilities of the Japanese method of colour-printing from wood-blocks. An illustrated guide to the exhibition has been prepared.

R.I.B.A. Special Committees.

The Council have made the following appointments to the undermentioned Board and Committees in accordance with By-law 49:—

BOARD OF PROFESSIONAL DEFENCE.

Max Clarke, T. Edwin Cooper, H. O. Cresswell, E. Guy Dawber, Wm. Dunn, Percival M. Fraser, K. Gammell, James S. Gibson, Edward Greenop, Edwin Gunn, Edwin T. Hall, Henry T. Hare, George Hubbard, C. Stanley Peach, Edmund Wimperis.

PROFESSIONAL QUESTIONS COMMITTEE.

Walter Cave, Max Clarke, Horace W. Cubitt, Frederic R. Farrow, K. Gammell, E. J. Gosling, E. Guy Dawber, Edwin Gunn, George Hubbard, C. Stanley Peach, H. A. Saul, H. D. Searles-Wood, Herbert Shepherd, E. R. Sutton, W. Henry White, William Woodward.

SCHEDULE OF CHARGES COMMITTEE.

Alfred W. S. Cross, E. Guy Dawber, James S. Gibson, J. Alfred Gotch, Edward Greenop, Henry T. Hare, George Hubbard, C. Stanley Peach, Sydney Perks, A. Saxon Snell, H. D. Searles-Wood, Herbert Shepherd, W. Henry White, Wm. Woodward.

OBITUARY.

The late Ernest Runtz [F.].

The career of the late Mr. Ernest Runtz, who was elected a Fellow of the Royal Institute in 1908, is a remarkable instance of success in architectural practice after a commencement very much later in life than is customary. He was nearly thirty years of age when he began the serious study of architecture with a view to a professional career, and he then attended the lectures of Professor Roger Smith at University College, London, where by dint of

hard work and natural ability he obtained the Donaldson Silver Medal for Fine Art. After two years' further study under the direction of the writer, he passed the qualifying examination for Associateship, and regarded this as evidence that he might feel himself "qualified" to advance from ardent admiration of architecture to professional practice of the art. His business career up to this time had been spent from the day he left school in the office of an auctioneer, valuer, and estate agent, Mr. Samuel Walker, to whom he was first an articulated pupil, and afterwards partner; but the arts of music and painting were his hobbies, and shared his leisure time with athletics, for he was a prominent racing bicyclist in the days of Cortis and Keith-Falconer. Retaining for a time his connection with Mr. Samuel Walker, he was not considered eligible by the Council for election as Associate, and, disappointed thereof, declared that he would wait for the day when the Institute would ask him to join. This he considered had arrived when several eminent members of the profession told him that he "ought" to join, and he was elected a Fellow in 1908, having quitted Mr. Walker's business some ten years previously and carried out several important buildings. The most notable buildings for which Mr. Runtz was architect may be taken to be the Gaiety Theatre, Gaiety Restaurant and Short's, in the Strand, the Norwich Union Assurance Company's offices at the corner of St. James's Street and Piccadilly, and the offices of the Anglo-American Oil Company in Birdcage Walk, all in London, but examples of his work are to be found throughout the whole of England, in Scotland, and on the Continent. The enthusiasm of Ernest Runtz for architecture being essentially based on his admiration of the art of the past, his designs, original in composition, were always based upon *motifs* of some precedent epoch. He attempted designs with French, Spanish, and English Renaissance as objects of emulation, but could never bring himself to look favourably upon the tendencies of *l'art nouveau*. In his later development he made constant endeavours to induce his clients to allow him the conjunction of sculpture and architecture in his designs, but financial considerations usually impeded his success in this direction. The rapidity with which Ernest Runtz changed from an amateur to a professional enthusiast in architecture might have been expected to connote insufficient knowledge of detail, but he was particularly apt in grasping the essentials and characteristic feeling of any style in which he might be working, though it is but fair to record that, from the demands of a large business upon his time, many of the actual details of his buildings were worked out by his partners, the late Mr. A. C. Breden [A.] and Mr. G. McLean Ford [A.], both of them artists in full sympathy with himself.

FREDERIC R. FARROW [F.].

CORRESPONDENCE.

Sir William Chambers.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—While searching in the Record Office I came across the accompanying amusing letter of Sir William Chambers. As an illustration of the carnal appetite acquired with the reins of power by even a celebrated architect it may furnish a further argument against "Official Architecture" for those to whom the fleshpots of office are denied!

W. J. DAVIES.

From Letter Book, Set 1, No. 5, 1777-1794, Works of Sir William Chambers. (The letter, which occurs on folio 48, between two letters of the 3rd and 7th March 1783, is undated.)

"DEAR SIR,—The Surveyor of the Board of Works and the Officers of that Board were allowed by ancient Custom til the time of their suppression two Bucks and two Does annually, and as a revival of our Places has also revived our Appetite for Venison I beg leave to request in behalf of myself and Bretheren, that the Allowance of the two Bucks may stil be continued to us which will enable us to eat as well as Drink their Majesty's health on the usual days of festivity.

I am with Great truth and respect

Dear Sir

Your faithfull and Obed Servt

WM CHAMBERS

"P.S.—Mr. Secker informs me the Secretary of the Treasury are also Treasurers of the Venison.
Thos Ordo Esqre"

COMPETITIONS.

Royal Palace and Law Courts, Sofia: Extension of Time for sending in Designs.

A memorandum addressed to the Royal Institute of British Architects from the Ministry of Public Works (Department of Architecture) of Bulgaria announces that the position of affairs in the Balkan States will interfere with the transport of designs in the International Competition for the Palais de Justice at Sofia, and also with the constitution of the jury of assessors. It has therefore been resolved to extend the date of sending in designs till the 1st April 1914 (new style).

Proposed New Government Buildings, Ottawa.

The Secretary R.I.B.A. has received a communication from the High Commissioner for Canada stating that he has been notified by the Department of Public Works at Ottawa that the date for receiving the first designs in connection with the above-mentioned Competition has been extended to 2nd April next.

Coventry New Technical Institute.

Members and Licentiates are advised that the Conditions of this Competition are not in accord-

ance with the Institute Regulations for Architectural Competitions, and the Competitions Committee are in correspondence with the promoters with a view to getting them amended.

THE EXAMINATIONS.

Exemptions from the Intermediate Examination.

The Council have passed a resolution that students who can produce certificates that they have passed with distinction through a full course of study (on lines similar to those now approved by the Institute) in Colonial or Foreign Schools of Architecture, to the satisfaction of the Professors of such Schools, may at the discretion of the Board of Architectural Education be recommended to the Council for exemption from the Intermediate Examination.

The Final: Alternative Problems in Design.

The Board of Architectural Education have approved the designs sent in as Testimonies of Study by the undermentioned candidates for the Final Examination:—

SUBJECT X.

(a) A CLASSICAL VILLA.

Bull: J. W.	Francis: G. E.
Callender: G. W.	Lone: R.
Clare: A. D.	Maxwell, A. E.
Dickeson: C.	Ripley: C. G.
Fernyhough: S.	Shewen: Miss M.
Fincham: E.	Williamson: F.
Fowell: J. C.	Young: W. C.

(b) A PIER AT A FIRST-CLASS WATERING-PLACE.

Barley: F. A.	Wood: A. J.
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The Board of Architectural Education.

The following have been appointed Members of the Board of Architectural Education:—Robert Atkinson [A.], Headmaster of the Architectural Association School; W. S. Purchon [A.], Lecturer in the Department of Architecture, University of Sheffield.

The following have been appointed Advisory Members:—Sir Amherst Selby-Bigge, Secretary of the Board of Education; Ramsay Traquair [A.], Professor of Architecture at McGill University, Montreal; the Professor of Architecture at the Edinburgh School of Art; the Professor of Architecture at the Heriot-Watt College, Edinburgh.

Mr. C. Stanley Peach [F.] has been appointed Examiner for the Examinations held by the Institute for the office of District Surveyor under the London Building Act and of Building Surveyor under Local Authorities.

ALLIED SOCIETIES.

The Bristol Society of Architects.

At the Opening Meeting of the Session, 13th October 1913, the President, Mr. G. H. Oatley [F.], presiding, a Presidential Badge was presented to the Society by Sir Frank Wills [F.], Past President. The badge is of gold, the centre portion being in enamel-work. It was executed by the Bromsgrove Guild, who submitted designs developed

ings, Birmingham, when Mr. G. Salway Nicol [F.] delivered his Presidential Address, in which he passed some severe strictures upon local architecture and the setting of the sculpture of the city. The following report is from the *Birmingham Daily Post* :—

Mr. Nicol said that architecture could justly be described as the art of proportion. He did not mean merely the harmony which could be produced by the juxtaposition of such dimensions as from custom they found to be pleasing,



from sketches supplied by Mr. John Wills and Mr. C. F. W. Denning [Licentiate], Hon. Secretary of the Bristol Society. Two links of the chain bear the names of the Past Presidents, Messrs. W. L. Bernard, Frank W. Wills, G. H. Oatley, Mowbray A. Green, J. Foster Wood, and the late Joseph Wood and H. Dare Bryan.

The Birmingham Architectural Association.

The Opening Meeting of the Session of this Association was held on Friday, 31st October, in the Exchange Build-

ing, but the sense of proportion which demanded that the treatment of every problem should be suitable and fitting to the needs which required to be satisfied. Some of the finest buildings in Birmingham were those where the greatest restraint had been exercised in the use of ornamental features. Those truths were so clear to them that they were apt to consider them common knowledge. The amount of ignorance of architecture in cities like Birmingham was appalling, and was a continual block to all their endeavours. He urged that the architects of the city should have an ideal, and a definite scheme of the means

to be taken to carry it out, for gradually making Birmingham a city to be proud of, whereas they were all thoroughly ashamed of it. "The lay out of our streets," proceeded Mr. Nicol, "and the position of the important buildings is accidental and generally a muddle. Consider for a moment how unsatisfactory is the small square at the back of the Town Hall. Some of the buildings themselves are fine, but what a total disregard of any relation one to another. Again, St. Stephen's Place, the approach to an important railway station, is not treated as such, and at this point again the buildings have no relation to one another. Then the other end of Corporation Street, a point of intersection of many important roads—how terrible it all is! Any second-rate French city would not tolerate such a chaos of freedom and license." The City Council, he felt sure, were prepared to do what they could. It was not that there was so much wrong with the buildings individually as the absence of any relation one to another or the position they occupied. The City Council were the only people who could deal with this, and they should prepare a town plan for the centre of the city and obtain powers to carry it out gradually as opportunity served. Many excellent suggestions from architects and others had been expressed at various times. These should gradually be marked on a plan and some day carried out. This method was generally adopted on the Continent with great success. On the Continent, in the midst of disappearing slums, they would observe the corner of some fine square, and after a few years they would notice a further section had been accomplished, and in time they would find that a fine scheme had taken the place of the previous chaos. Now this was not done at a sacrifice of accommodation or by elaborate and extravagant façades or monuments, but simply by a common-sense and proportional arrangement of buildings serving useful purposes, and at the same time, instead of shouting each other down with vulgar pretensions, obeying the laws of proportion and decency. Was it impossible to practise such methods as these in their own city of Birmingham, which was so wealthy and progressive that large sections of it were rebuilt in every decade? Architects could not possibly advance in this direction alone; they must have the support and co-operation of the general public, and it was because of this that their city was an expression of the character and intelligence of the inhabitants. In walking through their streets they got the impression that the chief motive of the people who worked in them was to turn everything into a means of getting rich quick; and then retire to some decent place to enjoy the result of their labours. Was it not better to live and work in decent surroundings? Fortunately, people were rapidly awakening to the important influence of environment on the development of fine character and in producing happiness. Unfortunately, in many of the schemes now being prepared under the Town Planning Act, architectural considerations were entirely neglected, in spite of the fact that this all-important element formed an integral part of the Act itself. It was pleasant and gratifying to turn to the way smaller problems were dealt with in cities like Birmingham. In domestic work in the country and the suburbs the English architect was a long way ahead of any other nation, and even in Birmingham they had a distinct school or type of such work, of which they should be proud. In the smaller civic buildings, too, they had achieved much, and if they could only improve their general street architecture the city would gain immensely. Discussing the use of sculpture in the open-air, Mr. Nicol said they had no reason to be satisfied with what they possessed in that direction—a few fine statues, a greater number of indifferent ones, but all, without exception, dotted about the city like chessmen who had got lost

Any sculpture in the open-air in a town must, as a first essential, be carefully placed in relation to the surrounding buildings. He knew that he would be met with the objection that they could not afford sculpture out of doors. Were we worse off than other nations who could? Was it not rather a lack of proportion in the expenditure of public moneys on art that laid out ten, nay, hundreds of thousands of pounds, in the purchase of old masters at fancy prices, to be placed in galleries enjoyed only by the connoisseur and student, rather than a reasonable expenditure on some fine sculpture in connection with our public buildings, where the enjoyment and refining influence of such work appealed to every passer-by. In conclusion, Mr. Nicol made an eloquent plea for a union of the arts—architecture, sculpture, and painting.

MINUTES. I.

At the First General Meeting (Ordinary) of the Session 1913-14, held Monday, 3rd November 1913, at 8.30 p.m.—Present: Mr. Reginald Blomfield, A.R.A., *President*, in the Chair; 54 Fellows (including 21 members of the Council), 37 Associates (including 3 members of the Council), 24 Licentiates, 6 Hon. Associates, and numerous visitors—the Minutes of the Meeting held 23rd June 1913, having been already published, were taken as read and signed as correct.

The following gentlemen attending for the first time since their election were formally admitted by the President, viz.: Harry George Crothall, *Fellow*; Judah Weinberg and T. Frederick Ingram, *Associates*; and Arthur Edward Henderson, F.S.A., *Licentiate*.

The Secretary announced that the following candidates, being found eligible under the Charter and By-laws, had been nominated for election in the various classes: As FELLOWS (12): Lawrence Stanley Crosbie [A. 1907], Harry Harrington [A. 1894], and the following Licentiates, who have passed the Examination qualifying for candidature as Fellows: Edmund Butler, Joseph Crouch, Charles Frederick William Denning, Edward Barclay Hoare, B.A. Oxon., Albert Edward Richardson, Ernest Tatham Richmond, Rupert Savage, Ernest Montagu Thomas, Montagu Wheeler, John Wilson. As ASSOCIATES (32): Edward Adams, Lionel Bailey Budden, M.A., Joseph John Crowe, T. Gordon Ellis, Henry Hubert Fraser, Francis Grissell, Frederick Millett Hammond, Joseph Garnet Hands, Bernard Robinson Hebblethwaite, Harry Duncan Hendry, Joseph Hill, George Alexander Kay, John Boyd Lawson, Leonard Linton, Francis Lorne, Gilbert Marshall MacKenzie, B.A. Cantab., John Ewart March, Alfred Ernest Mayhew, William Wilson Nimmo, Herbert Read Peerless, Aubrey Wyndham Phillips, Claud Vincent Ponder, John Charles Rogers, Tom Sadler Rushworth, Thomas Spencer, Robert Victor Sturgeon, Thomas Smith Tait, Eric Edward Temple, William Voelkel, Richard Walker, B.A. Oxon., John Wilks, Herbert McGregor Wood. As HON. ASSOCIATES (2): Ernest Fiander Etchells, F.Phys.Soc., M.Math.A., A.M.L.Mech.E.; Sir Francis Fox, M.Inst. C.E., Member of the Royal Institution. As HON. FELLOW: The Right Hon. Reginald Balfour Brett, Viscount Esher, G.C.V.O.

The President having delivered the Opening Address of the Session, a vote of thanks, moved by the Right Hon. Viscount Milner, G.C.B., and seconded by Mr. Cyril Cobb, Chairman of the London County Council, was passed to him by acclamation and briefly responded to.

The proceedings then closed, and the Meeting separated at 9.45 p.m.

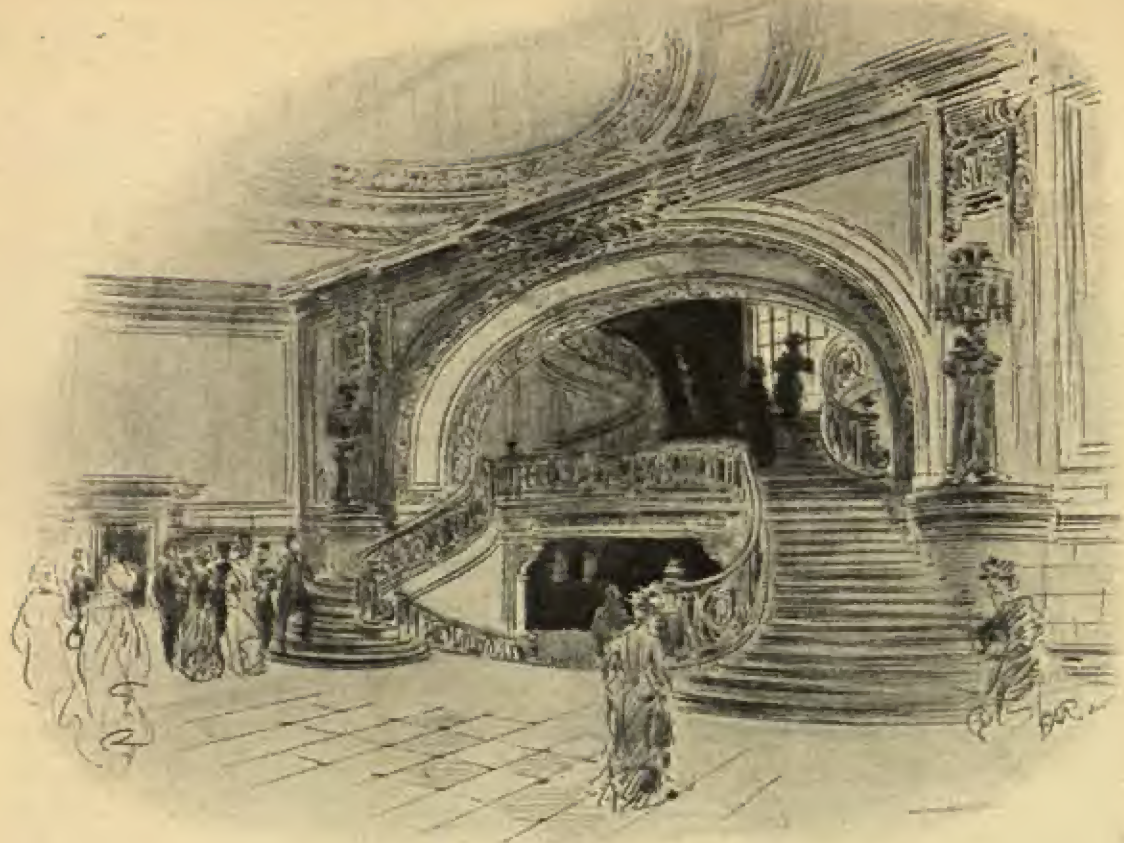


FIG. 1.—ENTRANCE HALL AND STAIRCASE.
From a Drawing by Mr. E. A. Rickards.

THE WESLEYAN METHODIST HALL, WESTMINSTER.

By H. V. LANCHESTER [F.].

Read before the Royal Institute of British Architects, Monday, 17th November 1913.

I COULD hardly have felt entitled to adopt the kind suggestion that I should read a Paper on the Wesleyan Hall, which I understand is to be the first of a series of prominent buildings dealt with by their architects, were it not for the fact that a number of problems arose in the design, the solutions of which present a certain degree of novelty and may be of interest to some of my fellow members of the R.I.B.A.

It would be as well to start with a brief reference to the competition, which was instituted by the Trustees of the Twentieth Century Fund for the purpose of obtaining the design for this building.

Sir Aston Webb was appointed assessor, and the conditions provided for a double competition, the first stage open to all, from which six or more designs were to be selected for further development. The option was reserved of inviting six other architects to take part in the final competition, but the assessor, having selected nine designs, advised that further invitations were unnecessary. The other architects taking part in the second stage were Messrs. Crouch, Butler & Savage, Cheston & Perkin, J. S. Gibson, Vincent Harris, Mallows & Cross, James A. Swan, Waddington Son & Dunkerley, and the late William Flockhart.

In the first competition we submitted two designs, one adopting an axis from the Victoria Street corner on lines somewhat similar to those of the design by Messrs. Crouch, Butler &



FIG. 2.—WESLEYAN METHODIST HALL, WESTMINSTER.

From an Original Drawing by Mr. E. A. Rickards in the possession of Sir Robert Perks, Bart.

Savage. As may be imagined, the diagonal axis introduces difficulties in planning; but for a building less in height than the present one it was an open question whether this was not the

more correct solution, considering that the main frontage was half of it masked by the Westminster Hospital. However, this diagonal scheme of ours did not reach the second stage, and consequently the design we had to develop was on the east and west axis, though it ultimately bore little resemblance to our original sketch, for the following reasons:—

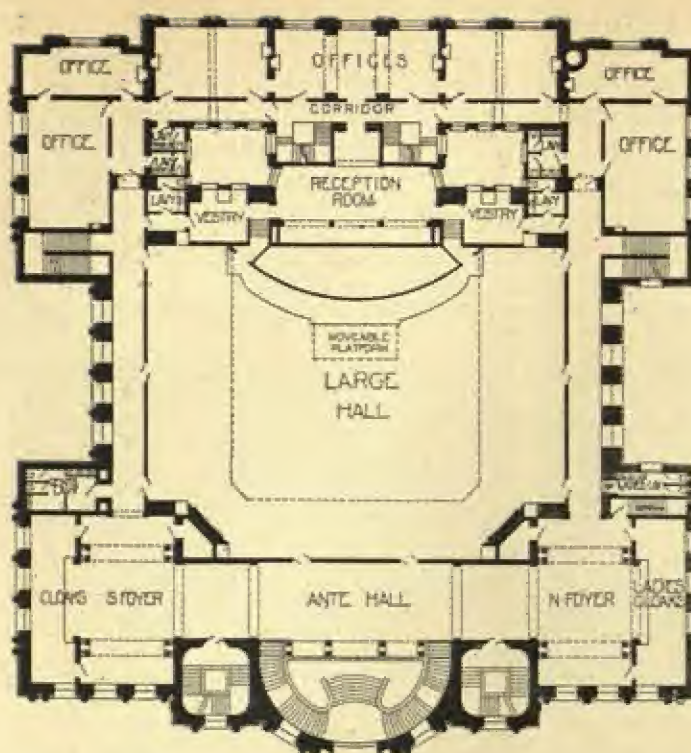
In common with many other competitors, we had placed the large hall, which was the main feature of the building, on the ground floor, being influenced in this course by the reduction in space effected by the omission of the numerous staircases such a hall would require, and the consequent reduction on the general cubic contents of the building. In revising the



FIG. 3.—INTERIOR OF THE GREAT HALL.

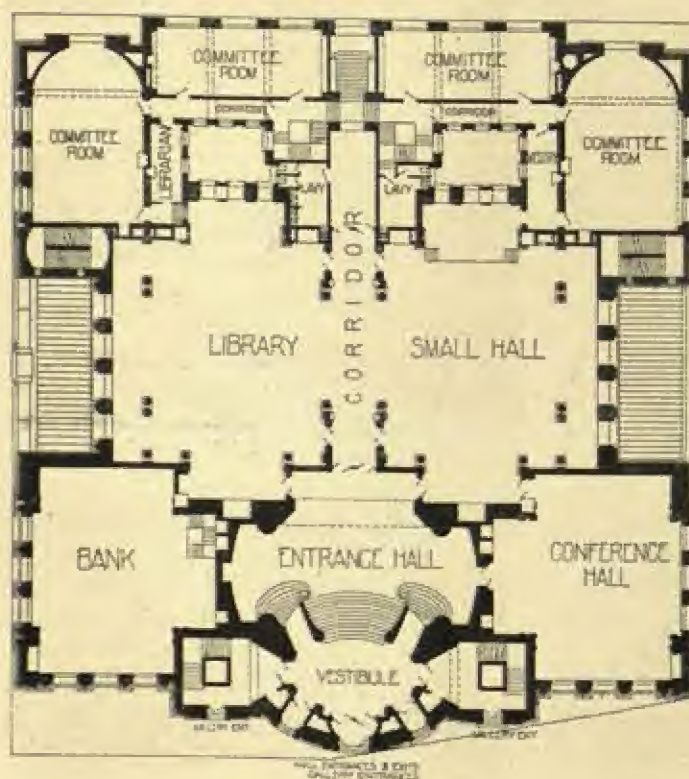
(Photo. Printing Craft, Limited.)

conditions for the second competition the Trustees added a clause requiring the large hall to be placed on the first floor, doubtless considering that this would be a more convenient arrangement for their purpose, and that a building so planned would be architecturally more effective. As the result of this condition, the large hall, rising above the rest of the building, definitely dominated the composition; and the height being considerably increased, the immediately adjacent blocks lose importance in dictating the axial line, which has to be determined in relation to the masses of the Abbey and the Houses of Parliament. Of course, what is really needed is the opening up of the east front by setting back the line of the Westminster



SCALE 1" = 10' 0"

FIG. 4.—FIRST FLOOR PLAN.



SCALE 1" = 10' 0"

FIG. 5.—GROUND PLAN.

Hospital; and now that the removal of the hospital has been decided on, such a course becomes obviously desirable, not only on architectural grounds, but also because Broad Sanctuary is quite inadequate to the requirements on ceremonial occasions.

At the last Coronation the most contracted position of the whole route was exactly at the Royal entrance to the Abbey. It is easy to see the course that should be adopted. The site at the back of the hospital is occupied by His Majesty's Stationery Office, which is shortly to be removed to Stamford Street. This land, having no frontage to an important street, is not of exceptional value. The course for the Government, therefore, is to give about a third of its area to the Governors of Westminster Hospital in exchange for a corresponding area fronting Broad Sanctuary. The hospital would be just as well off with this exchange as it is at present; the Government would give up land about half the value in proportion to that on which the hospital now stands, and the nation would get the immense advantage of a wide, dignified space in a position where it is absolutely needed.

I am glad to say that the London Society has taken the question up and is considering how best to forward the scheme.

But to return to the building itself. The principal requirements were :—

1. Large Hall, seating 2,500.
2. Small Hall, seating 600.
3. Library of the same size (these two to be thrown together on occasions).

4. Conference Hall.
5. A room of the same size (now occupied by the London City and Midland Bank).
6. Tea Room, to seat 1,000.
7. Four Committee Rooms.
8. A Block of Offices.

The Large Hall was, as I have said, required to be on the first floor. The Basement was suggested for the Tea Room.

We placed 2, 3, 4, and 5 together on the Ground Floor, and 7 at a slightly different level to the west of them. The Offices formed a block occupying the whole of the west front above and below 7, and the only internal areas are between this block and the Large Hall. The position of this Large Hall involved careful study as to the lighting of the space under it, but by recessing the north and south fronts adequate light was secured for the rooms in the centre of the building.

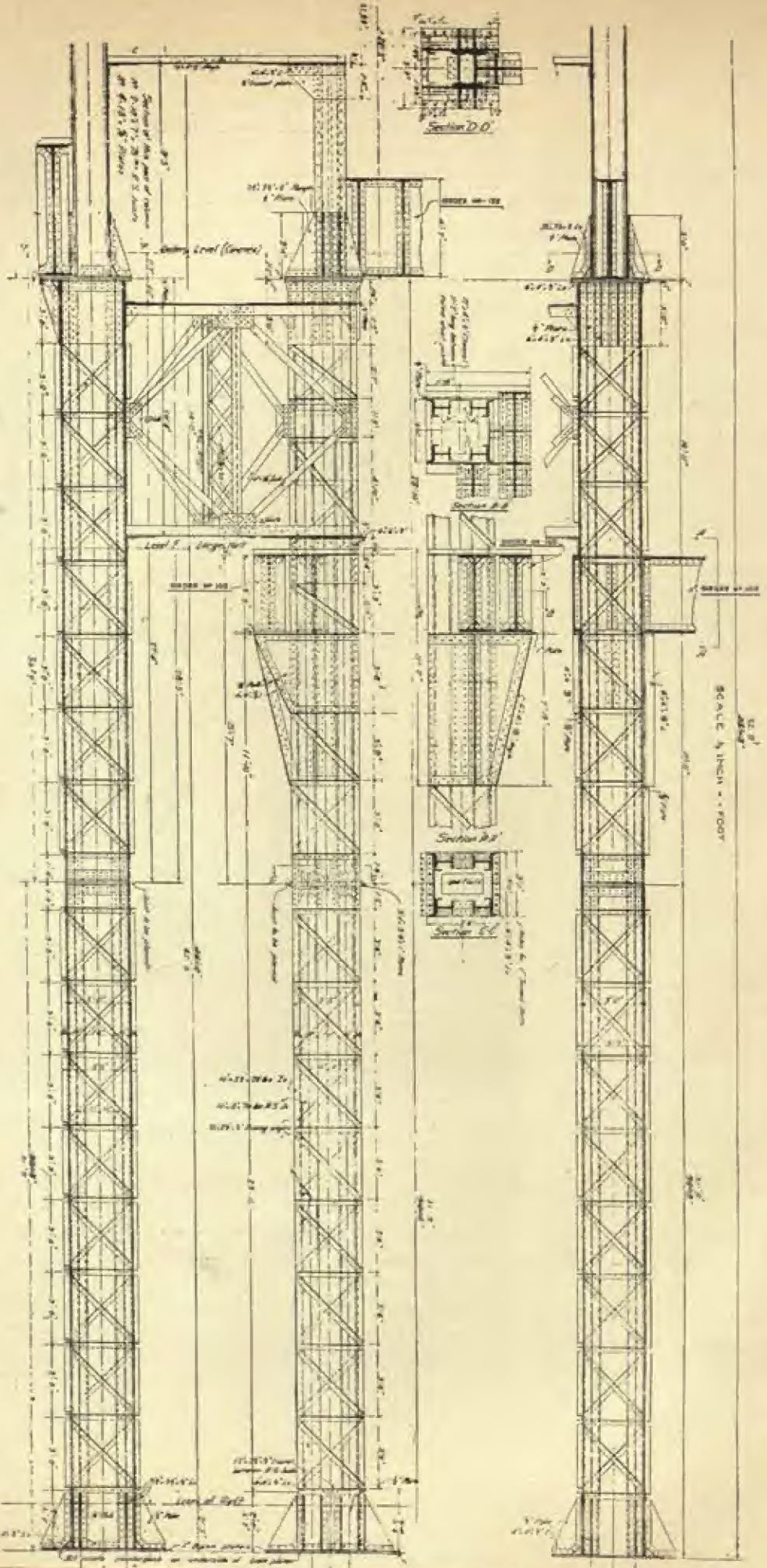
The site was somewhat limited, considering the amount of accommodation required, and this necessitated a treatment in planning that gave rise to a criticism of it as "budget architecture," implying that, structural requirements being met, the various floors are packed in without relationship to a uniform and definite architectural scheme appearing at each level from foundation to roof. This latter would naturally be one's ideal, but it is impossible of attainment when a proportionately large amount of carefully specified accommodation has to be placed on a limited area.

I need not take you through all the details of the plan on the various floors, as the drawings sufficiently explain them, but one point arises which may be worth a little consideration—namely, the arrangement of exits, which, in the case of a large hall placed some thirty-five feet above the street-level, naturally form an important factor in the general design. Now the ideal of experts in these matters is that you should pass from apertures distributed around such a hall into a number of tubes practically uniform throughout, and without sharp angles or turns,

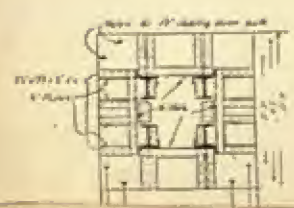


FIG. 6.—MAIN STAIRCASE.

(Photo. Printing Craft, Limited.)



SCALE 1/4" = 1'-0"



which ultimately deliver into the street. One can find an anatomical parallel in this expert's ideal in the intestines, but it need hardly be said that the principle is essentially unarchitectural. The architect instinctively dislikes this idea of passing from a spacious hall into a tube, and seeks a means of avoiding this tube altogether, or, if this is impossible, of making the transition a gradual one.

In the Wesleyan building we have endeavoured to surround the large hall with *foyers* as spacious in character as economic considerations would permit, while this scale is extended into the main staircase and entrance-hall on the ground floor. Of course, the subsidiary staircases are of the regulation type, but in the main approach, at any rate, some degree of spaciousness has been secured. This main staircase we found a very difficult problem in planning. On account of the large proportion of the first floor taken up by the great hall the only treatment that seemed to us satisfactory was its return backwards over the entrance vestibule, and this involved an exceptional amount of study in order to avoid effects that would have been noticeably forced and uncouth. In view of the fact that the hall is 35 feet above the street this staircase has been frequently noticed as disguising the height to a marked degree, and we feel it a great compliment to find that it has been imitated where the original difficulties leading to its inception did not exist.

Leaving the minor details of planning, I will pass on to the methods of construction employed. Reinforced work has been extensively used in the interior, for the reason that it is more homogeneous than any of the combinations of steel rollings with concrete and other materials. Our choice fell on the Kahn system as providing a bar that once in position was visibly adjusted to take up the strains provided for before filling-in commenced. Of course, there are other systems that achieve this aim, but we have not had the slightest ground to



(Photo. Printing Craft Limited.)

FIG. 8.—STEELWORK OF OUTER DOME.

regret our selection. Indeed, the only points where slight cracks have shown themselves are where, in order to economise depth, we resorted to steel sections.

It may be desirable to warn some of you that the published strengths of steel beams are not reliable; though they are well within the limit of safety, greater depth must be allowed where the slightest deflection will disturb the work above them.

In the general framing up of this building the heaviest weight accumulated at the eight angles of the main dome. Starting from the top, we have the outer dome, a relatively light shell, the much heavier concrete inner dome, the concrete and masonry of the pendentives and the arches across the transepts; then the girders carrying the overhanging galleries, a proportion of the walls and floors below this, and, finally, the weight of the piers themselves. With allowances for wind pressure, &c., the weights reaching the foundations at each of these points range from 500 to 600 tons, and as it was, of course, desirable to equalise the weight as much as possible a steel raft was provided under each pair of piers, which gave a distributed weight of 2 tons

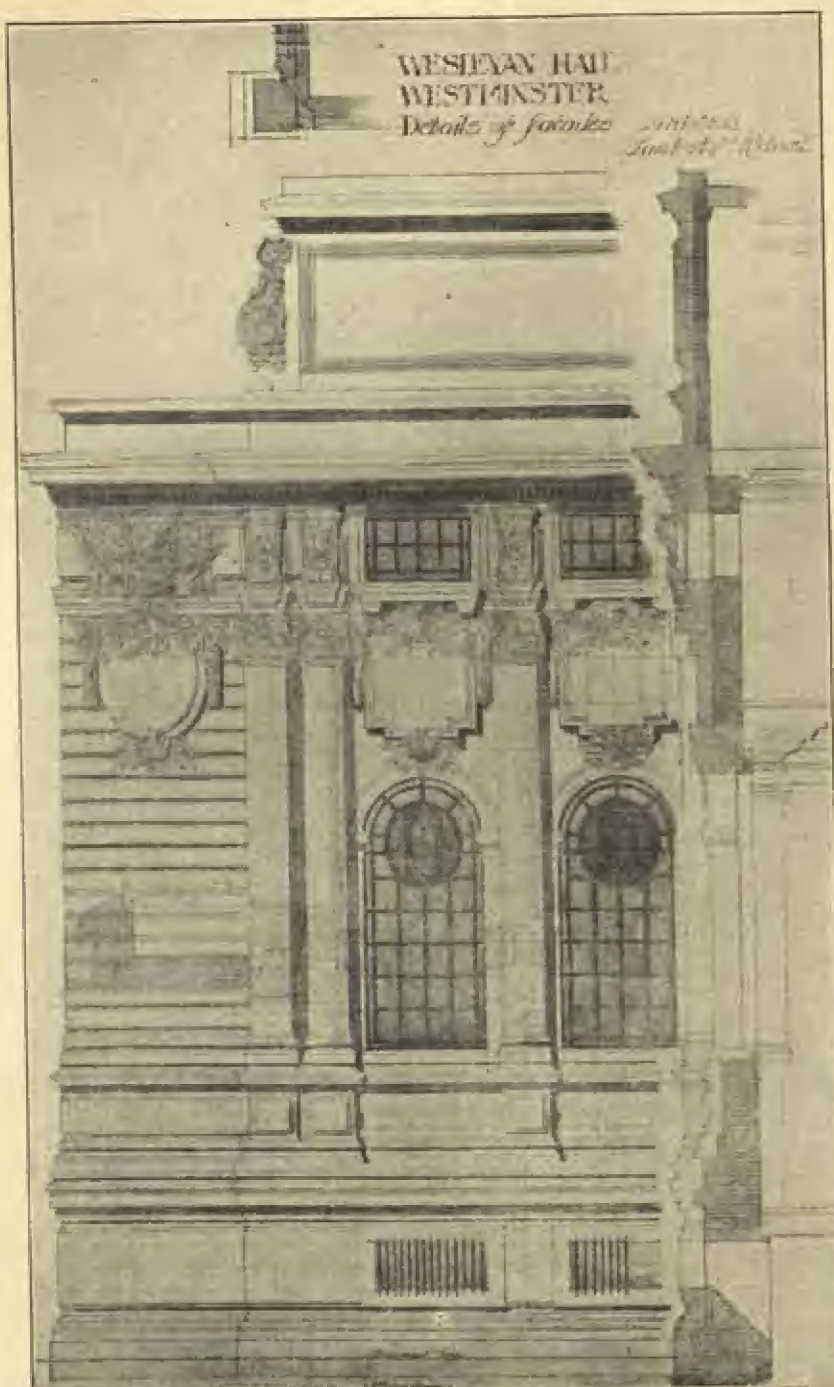
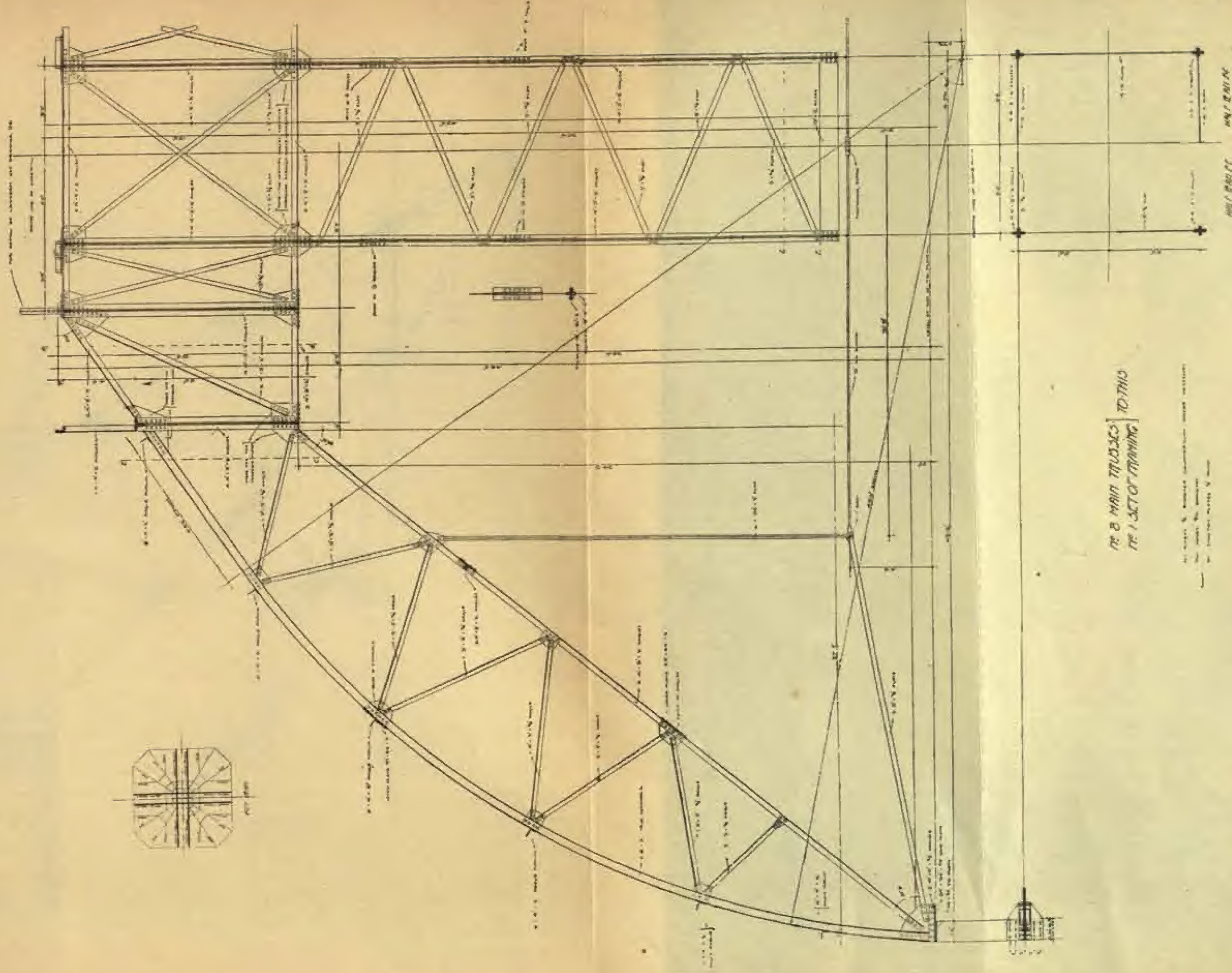


FIG. 11.—SKETCH DETAIL OF S.E. ANGLE.

to the foot super. Under the whole of the remainder of the building was a reinforced concrete raft of varying thickness, and the weight on this generally was about $1\frac{1}{2}$ tons per foot super.

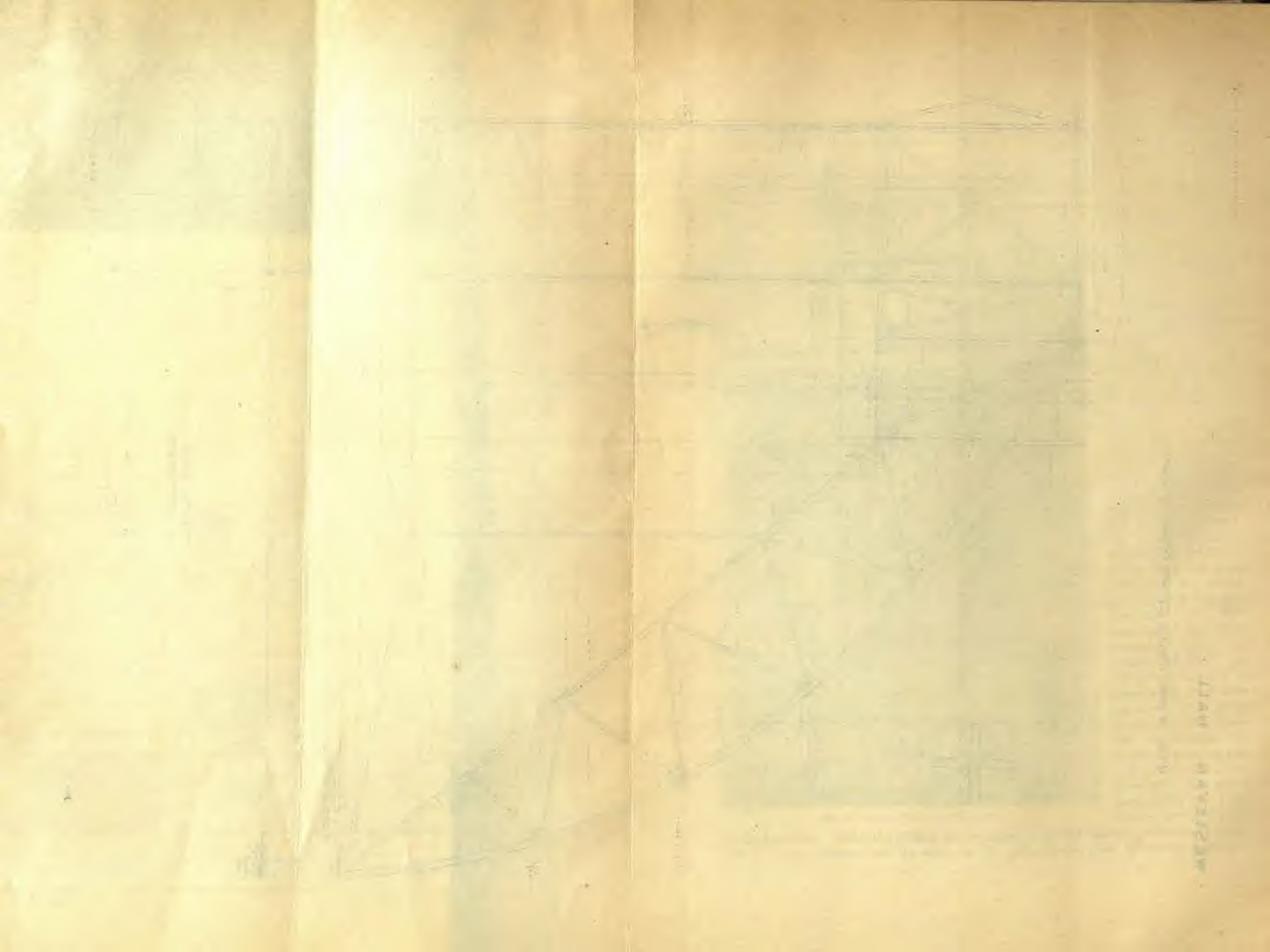
WESLEYAN HALL

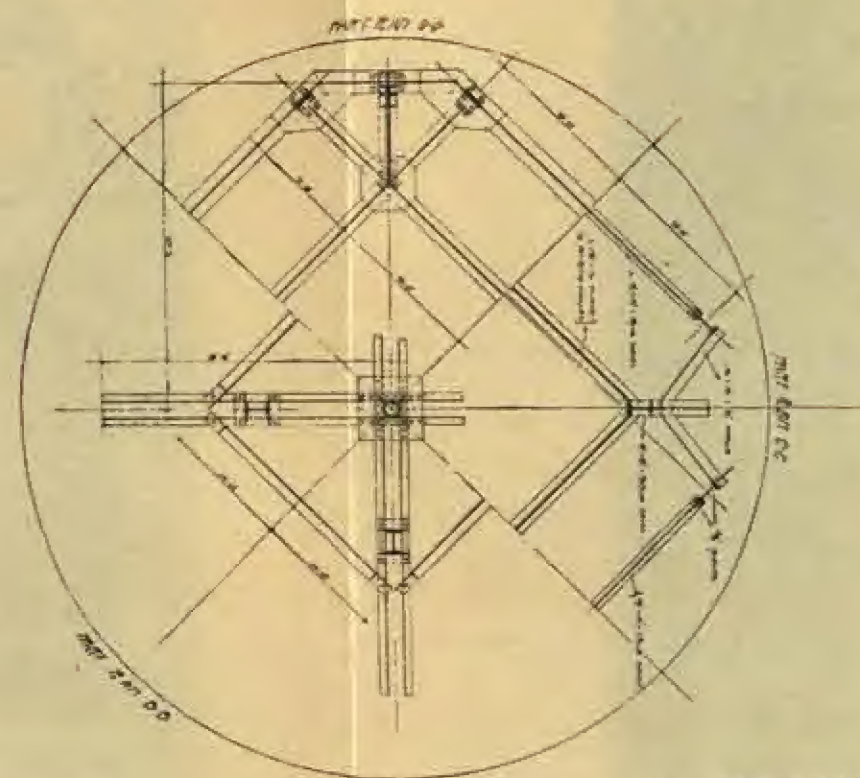
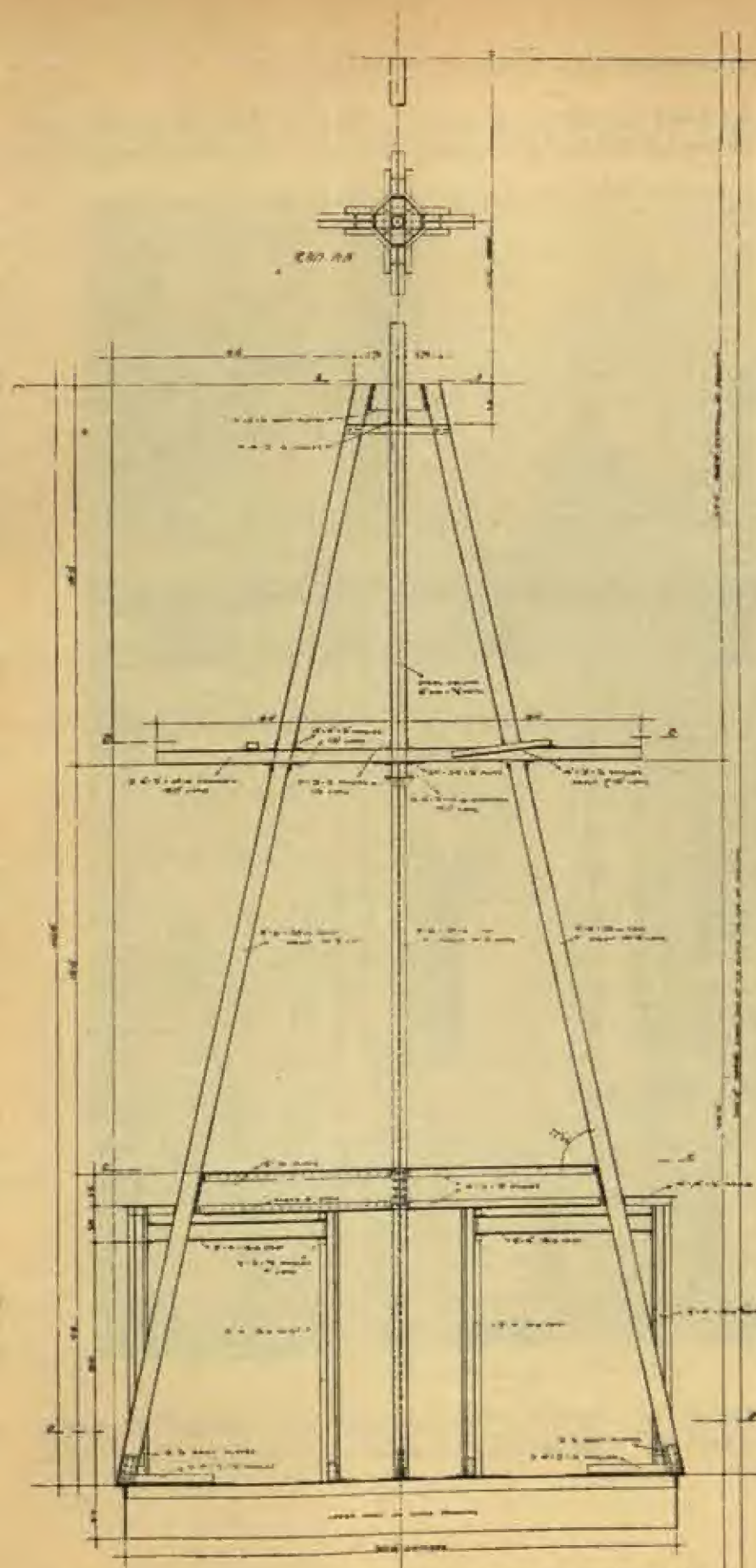
DETAIL OF MAIN TRUSS & CENTRAL PARTING OF DOME



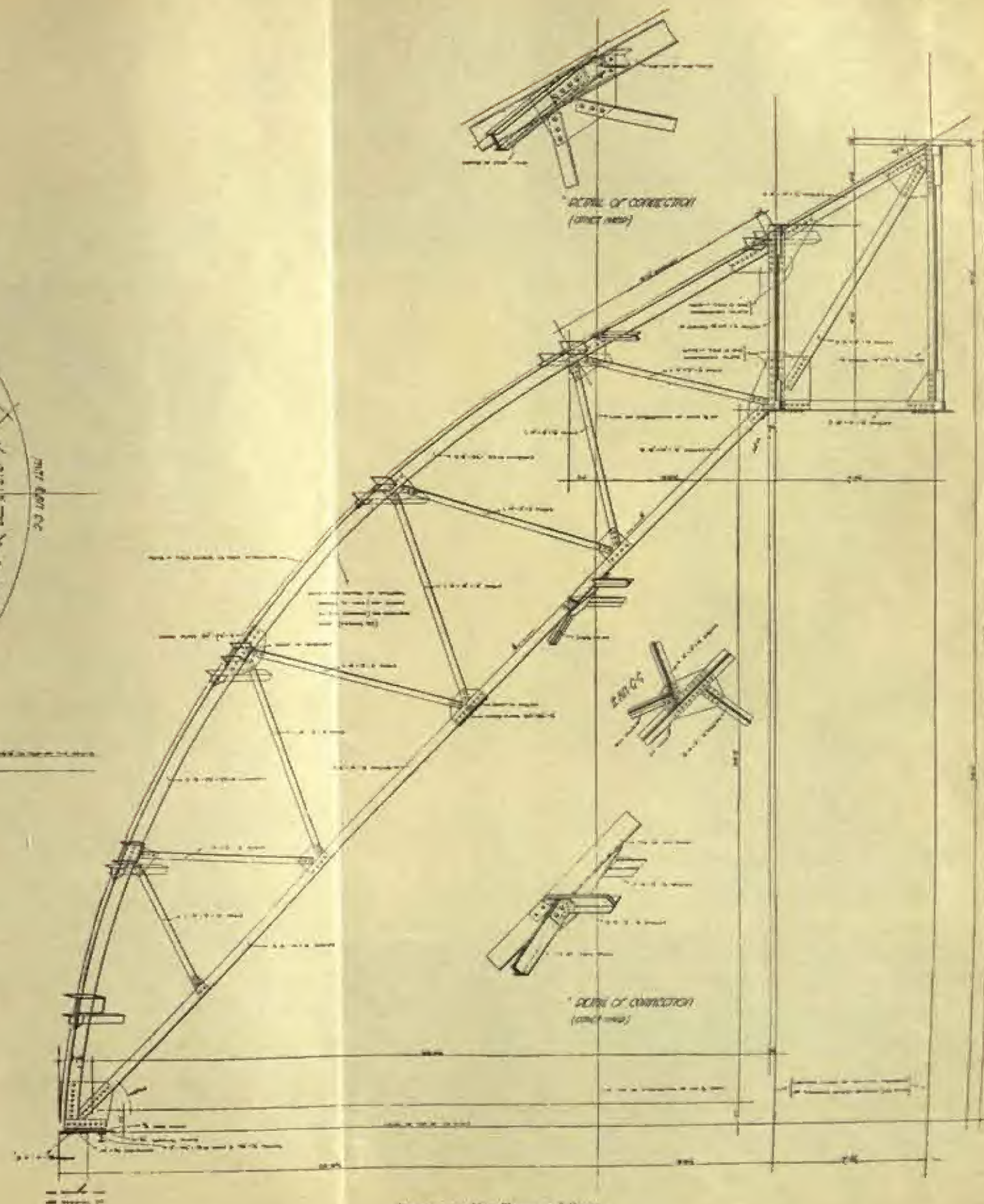
TO THIS
SECTION OF TRUSS

See Notes on General Construction and Details
for further information

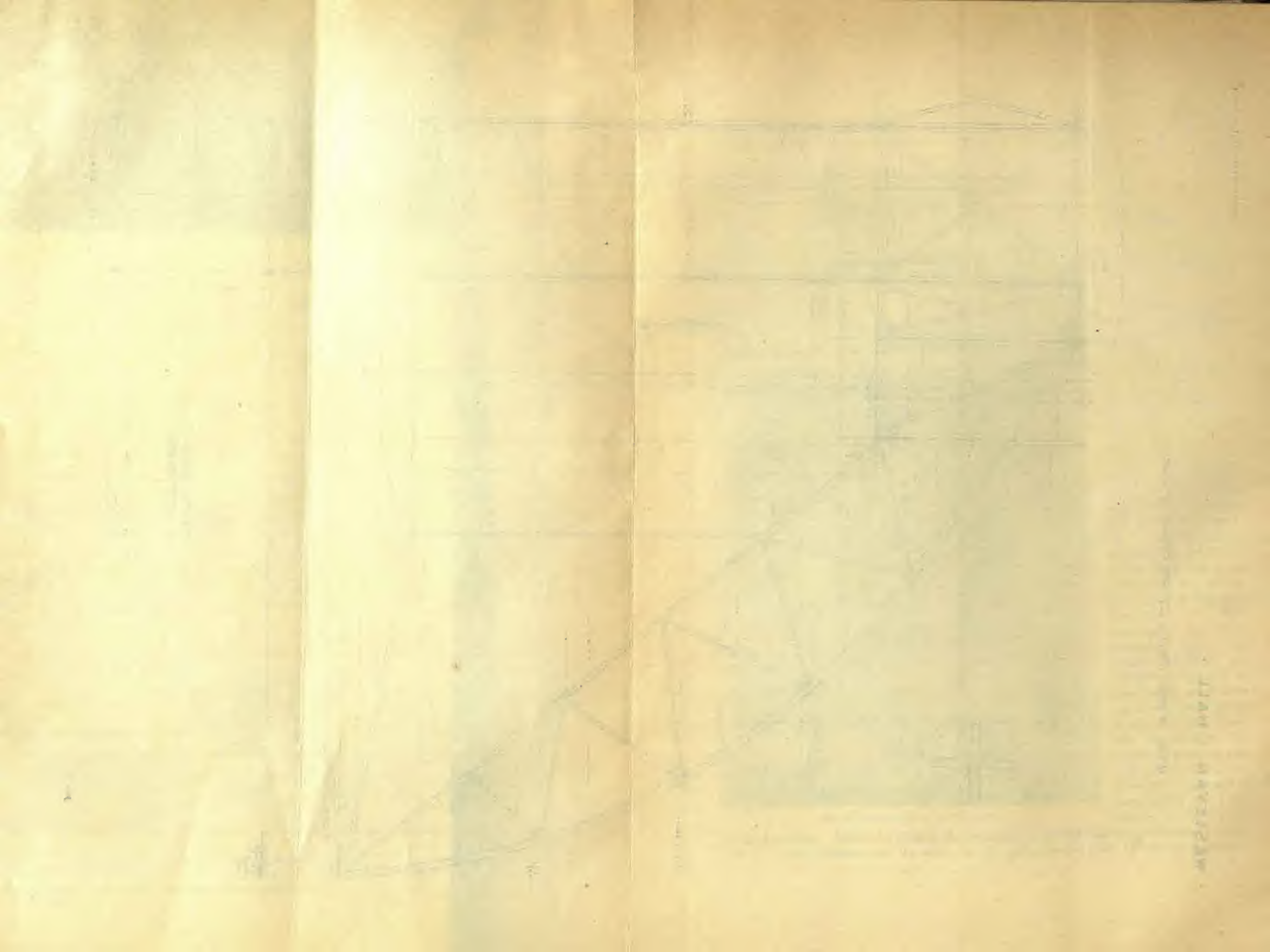




PLAN OF STEELWORK IN LANTERN OF DOME



DETAIL OF HIP TRUSS TO DOME



The excavation brought us down to a uniform bed of sand, and I am pleased to say that not the slightest settlement is observable, despite the fact that the tunnel of the District Railway

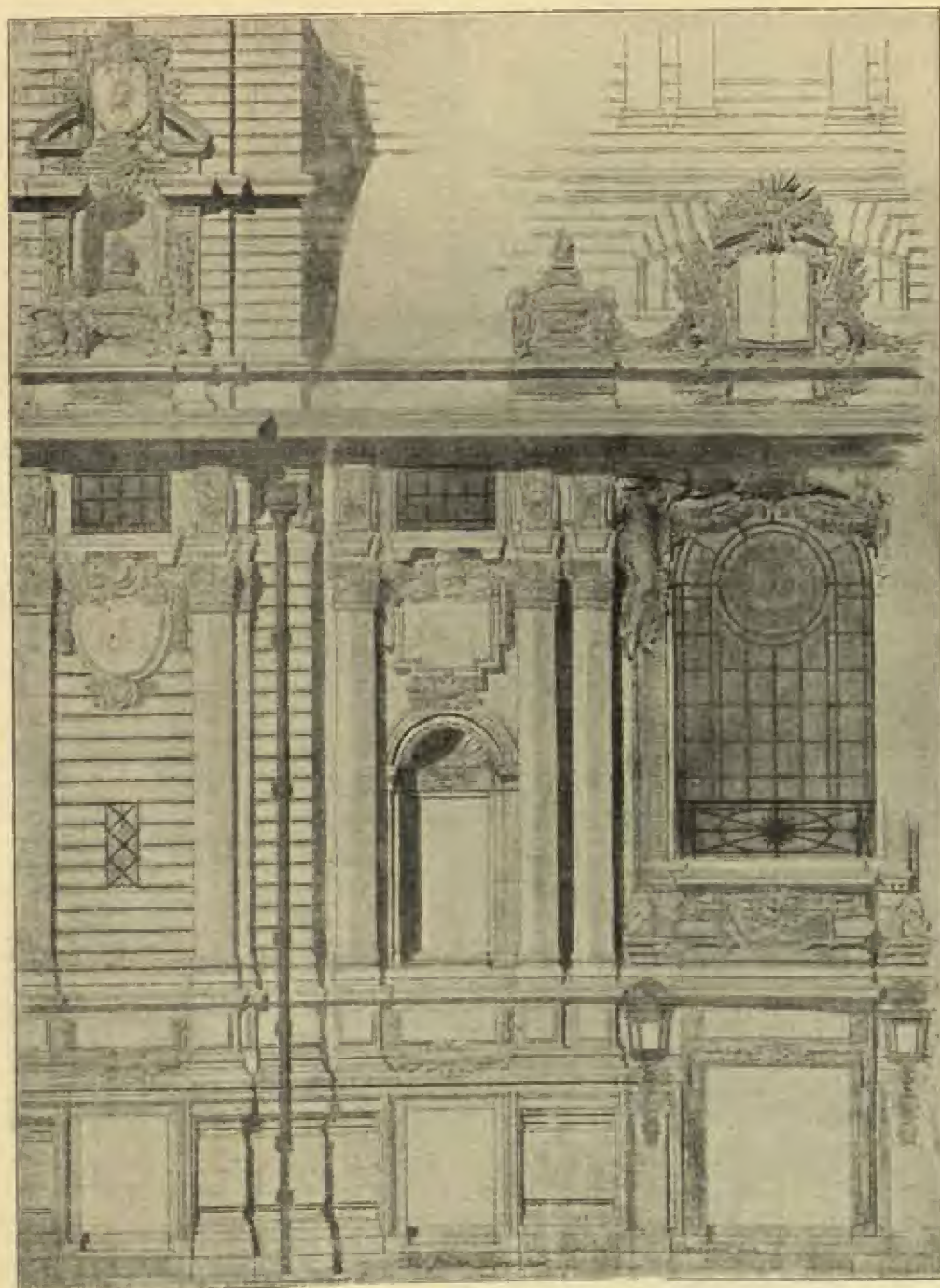


FIG. 12.—SKETCH DETAIL OF EAST FRONT.

adjoins the building. The eight main piers to which I have referred were formed of steel sections, at the angles of a 3-foot square, tied together with steel lattice-work, and entirely

encased and filled with cement concrete. We ourselves worked out the methods of construction in these, and throughout the rest of the building, but we were indebted to Mr. de Colleville, then with the Trussed Concrete Steel Company, for checking our calculations and supplying details of connections, riveting, &c. The remaining piers were of reinforced work with vertical bars and horizontal lacing. The basement floor is 7 feet above the bottom of the concrete,



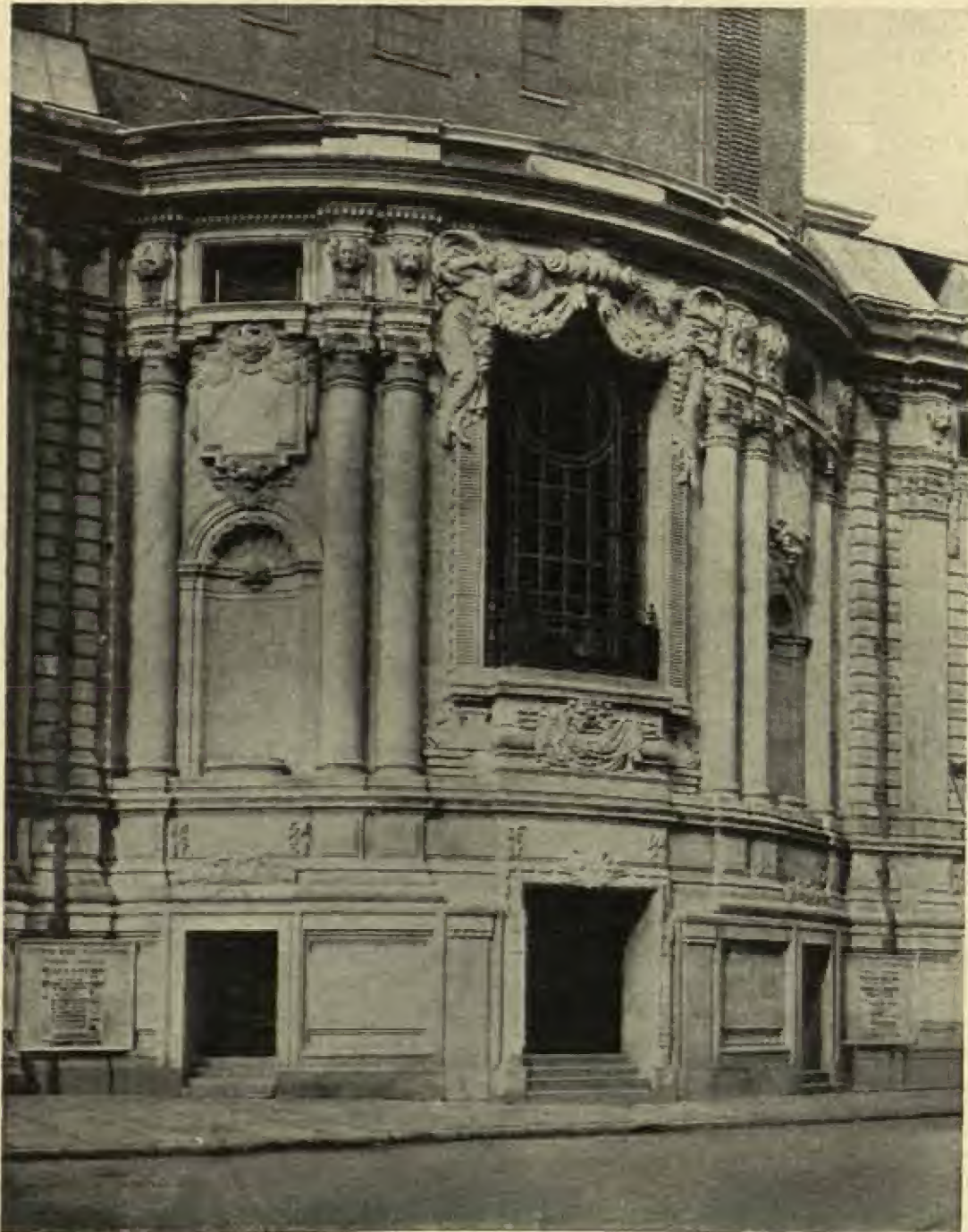
Photo. Printing Craft, Limited

FIG. 13.—SOUTH ELEVATION TO TOTTHILL STREET.

which gave us the requisite depth for distributing the weight under the heavier piers and for the provision of ventilating and pipe ducts. The large spaces on the basement floor were covered with thin reinforced concrete vaults, carrying a flat floor about eight feet above the street, which is the ground floor of the main building. (The floors of other parts are at different levels.) The floors above this are constructed of reinforced concrete, with hollow tiles to reduce weight.

The galleries demand some description. As previously mentioned, they are mainly sup-

ported by deep girders connected to the lattice stanchions; these form the fulcrum from which they cantilever forward, while the back is built into the main walls. The ramps pass over,



[Photo. Printing Craft, Limited.]

FIG. 14.—MAIN ENTRANCE BAY

and the soffits under, these main girders, so that the cantilevering does not entail excessive weight.

Over the galleries are the transept vaults, elliptical in form, and thickened into strongly reinforced beams under the vertical walls of the outer dome. From these beams and the pendentives springs the coffered inner dome of reinforced concrete, with two rings of steel plate to resist the outward thrust.

Although the Large Hall is 70 feet in height, its dome would hardly be visible from outside, and the outer dome, relatively light in construction, rises some fifty feet higher, exclusive of the lantern above it. As our design based itself on the conception of a square dome with the angles cut off, forming an irregular octagon, we necessarily had to meet the special constructive requirements that such a form demands. A circular dome is relatively easy to construct, there being no tendency to distortion; but all other forms have an inclination towards



FIG. 15.—THE LIBRARY.

(Photo. Printing Craft, Limited.)

the circular, a straight-sided dome tending to bulge horizontally between the angles. Our first step was to provide at the base a plate of great horizontal rigidity firmly tied at the angles. As the weakest points were towards the middle of the four long sides, we treated the ribs in this position as principals tied right across; these are in pairs, connected together at the top with a braced ring, which carries the lantern and links up the angle-ribs, which are also braced on similar lines. These ribs and the intermediate ones carry the steel purlins and timber rafters of the dome covering. The lantern is mainly of timber construction, but stiffened by four steel ribs steeply inclined at the four angles, these ribs carrying the finial rod, and torsion is guarded against by a horizontal bracing near the top of the lantern filled in with cement concrete.

Having outlined the general arrangement and construction of the building, I need only

supplement this with a few notes on the engineering requirements before passing on to the question of the architectural treatment.

The drains of Westminster are liable to flood up to within four feet of the street-level, and as our basement is some eight feet below this we decided to put in a Shone ejector to lift the discharge from soil-pipes and wastes up to a safe level, and into these low-level drains we had to take the rain-water from the four small sunk areas; but all the rain-water drains from the roofs were kept at a higher level, above the flood-line. In two cases this involved the suspension of the pipes from the ceiling of the basement. The drain-pipes and man-holes were all in iron.

In order to comply with the L.C.C. regulations, the electric-light wiring was arranged on two independent circuits, and it was originally intended to take supplies from separate generating stations of two companies. During the construction of the building, however, these companies were amalgamated, and one supply only was ultimately available, entailing the provision of a fireproof chamber for a battery of accumulators serving the smaller of the two circuits. Mr. Kerr-Jones was our adviser in respect of this portion of the work. The electric fittings throughout the building were specially designed by us with the view of their harmonising with the general character of the work.

The heating is by low-pressure steam, and in all the more important rooms the heating and ventilation were combined by the employment of steam batteries in ducts supplying fresh air, and the temperature is regulated automatically by means of thermostats. There are two intakes, with filters and blowers, one in the north transept for the great hall, and the other in the position of the south-east tower (not built) for the remaining large rooms. The outlets are likewise separated, those in the great hall communicating with the space between the inner and outer domes, which is open to the lantern at the top, and the outlets to the other rooms passing down to the sub-basement in which ducts are formed, carrying the air to an extraction chamber delivering into one of the two internal areas.

We now come to the architectural raiment with which this structural body is clothed for the purpose of indicating at a glance the intent of the building. As this intention was a complex one, comprising several demands, the problem of their due expression was a difficult one.

First and foremost it was desired to have a monument to commemorate the vast activities of Wesleyan Methodism during the past century. Then there was the present use of the halls for religious purposes. Then again the housing of all the business organisations underlying the various social activities of the Wesleyan Methodist movement.

A Gothic design was obviously unsuited to the expression of a movement so distinct in its aspirations from those we habitually connect with that phase of our art. A design solely suggesting a place of worship would unduly subordinate the other demands, while one looking too business-like would destroy the idea of a commemorative monument. We have endeavoured, to the best of our ability, to suggest the breadth of conception that a monument demands without obscuring either the religious or practical aspects. For example, the form and treatment of the dome was decided with the intention of its conveying an idea neither too definitely religious nor too definitely secular. The architectural character of the façade, while largely based on religious symbolism, was more specifically intended to strengthen the idea of a monument to the strenuous and sustained effort of Methodism, and in many of its details arose almost naturally from the type of architectural design employed with a view to express activity and force.

Criticism has more than once levelled its guns at some of the objects employed conventionally, to enhance this expression, but I can safely appeal to my brother architects in asking for

an endorsement of the axiom that the important matter is the character of expression as a whole, and that if the details merge legitimately into this their use is justified. Criticism of the kind mentioned is not that of the artist, but rather of those who, while blind to the full comprehension of a design, imagine that they can assess its merits or demerits by the analysis of its component parts. It is possible to read almost any architectural feature as a symbol. The column and its entablature are rarely structural in their intention, and as what one mind grasps as symbolic another regards from the standpoint of decorative beauty, the architect can only work on his own instinctive methods and leave to his appreciators the form of emotion that his efforts will evoke in their minds.

DISCUSSION.

Mr. ALFRED W. S. CROSS, M.A.Cantab., *Vice-President*, in the Chair.

THE CHAIRMAN, in inviting discussion, said that the Institute was fortunate that evening in having present among them three of Mr. Lanchester's colleagues, viz. Mr. F. L. Dove, who was responsible for the erection of the building, Mr. Henry Poole, who was responsible for the sculpture, and Mr. George Corderoy. They had also to congratulate themselves upon the fact that their distinguished Past-President Sir Aston Webb was making one of his all-too-rare appearances at the Institute, and had kindly consented to propose a vote of thanks for the Paper.

SIR ASTON WEBB, C.B., C.V.O., R.A., said it was so many years since he had assessed the competition that the details were not as fully in his mind as he would like them to be; but he had the greatest possible pleasure in moving the vote of thanks. He did not know, until he had read this Paper, that Mr. Lanchester and Mr. Rickards had sent in two designs. When people send in two designs, he thought they should be treated like a man who sends two horses to a race, and be asked to declare which they would win upon! He gathered from Mr. Lanchester that with the final condition of a hall at the top he preferred the axis where he finally had it. There were designs sent in which had the axis on the angle—and extremely clever and able many of them were, so clever and so able that one rather hesitated to adopt them. There were an enormous number of designs in the first competition, and he looked through them over and over again; and every now and then he came across a little sketch, done in ordinary ink, apparently freehand, and each time he came across it he grew more and more impressed with it, until at last he came to the conclusion that, although it was very sketchy and slight, it had the germs of a fine thing in it; and so that design was included in those selected. The competition was interesting, as it showed that in this case there was some use in a double competition; the Trustees realised the great problem they were putting to architects after the first competition, and decided, and he thought rightly, that the great hall should be on the top of the building. So in the second competition all the competitors

were informed of this, as it would have been a great pity if men had wasted their work on a scheme which the Trustees felt was not what they wanted. They wanted the big hall on the top, he thought, because it would be comparatively seldom used, whereas the small halls were likely to be in constant use. Then came the second competition. He had, personally, no doubt in his selection, although there were several other excellent designs; their Chairman that evening happened to be one of those who sent in an extremely good one. But he had no doubt that, taking it altogether—(and the Assessor had to make up his mind and decide that one was better than the others, however unpleasant the duty was)—that Messrs. Lanchester and Rickards' design was the best. On explaining to the Trustees his reasons, he found, as he had always found, that they were very reasonable, and saw eye to eye with him in the matter. And so the design was selected, and the architects of it were appointed, as of course should always be the case. He told the Trustees that they had an excellent design; that they had two very excellent and distinguished architects, and that if they put their full confidence in them they would have a fine building at the end of it. The Trustees had followed his advice, and he thought his prophecy had been justified. Only one little suggestion he ventured to make—it was unwise for an assessor to make many suggestions—viz. that the main entrance might be a little larger. That was not adopted, but when he saw the illustration on the screen that evening it reminded him that he had made that suggestion. And he was not at all sure, if they asked him now, that he should not say the same. On the other hand, it reminded him of a little story which his friend Bell told of Eden Nesfield, with whom he had worked a good deal. Nesfield was making a design for a very large house, and had sketched a very delightful entrance. A friend came in and looked at it and remarked that it would make a very handsome entrance. Nesfield said nothing, but when he had gone Bell saw Nesfield take his indiarubber and rub out the whole thing. Asked the reason, he replied that he hated handsome entrances, and then he

drew in a tiny little entrance. So he supposed that Mr. Lanchester and Mr. Rickards had the same feeling. Mr. Lanchester had mentioned an important point with regard to Westminster Hospital. He (Sir Aston) happened to be connected, not professionally but otherwise, with Westminster Hospital. Mr. Lanchester thought that Westminster Hospital should push itself back. Westminster Hospital was going, and if the Government would push the building-line back it would be a very good thing. The London Society were taking that matter up, and he hoped that some fresh line would be adopted for the future building on the site of Westminster Hospital. But when this Wesleyan building was started he believed Mr. Lanchester and Mr. Rickards thought that it should be pushed back; it would only have reduced the amount of space at the rear for developing commercial offices, and the roadway through to Great Smith Street would have been enormously improved; and probably this design, instead of being mutilated, might have had its towers complete, as it was originally designed. But the authorities were not in favour, and it had not been carried out, to the great detriment of Westminster, and London generally. One would have liked to have heard more from Mr. Lanchester with regard to the construction. Reinforced concrete had been used in a very bold and successful manner, and the more one heard of it the better for everyone, for this reinforced concrete work was at present in its infancy, and in such an important case as this they would like to learn all about it. He had crossed the Atlantic with Mr. Lanchester, who, he believed, was visiting the United States in order to find out the way in which this work was carried out there, for they had used the material much more than we had. He hoped that some day, when he could get him quietly alone, Mr. Lanchester would give him his real opinion and say whether he would repeat the experiment! Then there was a small matter of practical work. He should like to know whether the thermostats worked in this building. He had been advised over and over again to use thermostats. It seemed delightful. If the temperature went up beyond what they wanted, the thermostat began to close, and the temperature went down. Hence with a thermostat the temperature of the room could be kept absolutely normal. Coming to the architectural clothing of the building, he ventured to think that the architects in this case had chosen the right and, indeed, almost the only main features that they could choose for building in that very special position. They chose the dome, because there were towers all round belonging to ecclesiastical buildings of all denominations of one faith. And they had adopted a dome of that form which did not attempt to compete with St. Paul's, or any building of that sort, but it looked as it should do, like the hall of a great corporation. With regard to the details, he agreed with Mr. Lanchester that in a large building of

that nature the small details were beside the mark. The expression of the whole thing was the great matter. Still, when he walked down Tothill Street he was sorry for the panels of which he had shown them photographs, and which he understood were to have inscribed on them Love, Faith, Truth, Charity, etc., whereas instead they had the name of a Bank. That was unfortunate, but he looked forward to the day when the tables of the money-changers would be overthrown and swept out of the Temple and the whole building be devoted to its original purposes. That, again, had nothing to do with the architects, but it showed the commercial spirit of the age with which, he was afraid, many religious ventures were managed. Mr. Lanchester had referred to certain criticisms of this design. He was sure they would agree with him that they were not going to criticise at that Meeting; they were going to congratulate heartily two distinguished architects for having carried through a great building nobly and successfully, which added to the beauty of that part of London in which it had been placed. Mr. Lanchester had spoken about artists' criticisms. Artists, as far as he knew them, were not the little critics who found little faults with little things; an artist was a man who, as a rule, had very strong feelings as to what he liked and disliked, but he was mainly a man who was delighted to show appreciation for a work, and if he did not like it he would not say much about it: that was all. Artists were producers and not the people who went about with little cheap and nasty criticisms, and one was almost sorry that Mr. Lanchester had referred to them at all. It was a noble building, and they were met that evening to congratulate the architects; and it was with the greatest possible pleasure that he proposed a vote of thanks to Mr. Lanchester—and he would like to include Mr. Rickards in that vote—for the noble building which they had put up.

Mr. GEORGE CORDEROY, in seconding the vote of thanks, said that he had a very wholehearted admiration for the monumental building which they owed to Mr. Lanchester and Mr. Rickards, from an intimate association with it from its inception and through all its stages. He knew he was voicing the responsible opinion of his Church when he said they thought it absolutely fulfilled the requirements of the Conference; that it had given them that monumental building which they desired, a building which was worthy to commemorate the Centenary of the Church. Sir Aston Webb had passed very lightly over his assistance to the Trustees as Assessor. But he could assure them that there were stages in the inception of that building which tried even Sir Aston's tact and discretion. It was not easy to get a body of Trustees to carry out even instructions which were given them in a certain direction, but everybody associated with this work must unite in congratulating the authors of the design on the very noteworthy success they had achieved, and he was very

glad to have the honour of being permitted publicly to do so. The problem of getting into the building all the diverse accommodation to which Mr. Lanchester had referred was no easy one, and the position of the great hall did not make it easier, though there was no doubt about the effect which had been produced by the situation in which it had been placed. The minor accommodation had had to be sacrificed to it to a large extent, and the kind of criticism to which Sir Aston Webb referred was heard, of course, with regard to the results in some of the office accommodation, and the reflection made by some people, who wished they had lifts to the great hall, was the only adverse criticism he had heard. With regard to the exits, they were one of the most successful features of the design; in practice, he could assure the architects, they worked very admirably, and the foyers were a great advantage for the purpose for which the building was to be used. With regard to the reinforced-concrete construction, he had seen a great deal of this particular method of construction, but he had never seen such a varied application to the purpose of any building; and the methods of design adopted were of the greatest interest, and the drawings would repay careful study. In fact, he wrote to the Editor of the *Builder* and suggested that the illustrations used in that journal should be published in a monograph form for the purposes of reference. He thought that would be an advantage to all who were interested in reinforced-concrete work. He would not presume to comment on the architectural features of the building, although he had broken a friendly lance with Mr. Lanchester about the kind of sculptural decoration, and he should be glad to hear his reply about that. With regard to the question of cost, it would be interesting, and, he thought, a surprise to many of them, to hear that this building had worked out at one shilling per foot cube—a most remarkable economic result. After some experience of the cost of large buildings, he might say that it was the cheapest building of its class with which he was acquainted.

Mr. F. L. DOVE, in supporting the vote of thanks, said that, from a long experience in buildings from the constructive point of view, he could offer no criticism at all. From the time they commenced the excavation and got down to the bed of sand to which Mr. Lanchester alluded, to the time when they put on what had been called the "sweep's broom" by some, and as "the sun in glory" by others, on the top of the lantern, he did not think there was a single point on which he felt competent to express any criticism. He had over and over again, during the progress of the work, admired the bold treatment which Mr. Lanchester and his partner brought to bear on the subject—treatment which, perhaps, one would have thought twice about before going very far with. But from the time they commenced the reinforcement under the big octagonal piers which

carried the dome, to the finish, everything seemed to fit so perfectly and to be so well thought out, that one felt perfect confidence in everything that was done. The cantilever truss over the galleries which had been shown them was almost a marvel of construction; he forgot what the overhang of the gallery was, but there was not the faintest vibration in it, it was carried out so splendidly in the way it was tied back on to the walls. And the same remark applied to the concrete dome over the great hall. The dome was not particularly high, but it was entirely in reinforced concrete. Though it was comparatively thin, it had a great amount of work to do; on one side it had to carry a large amount of heating apparatus, and it carried it in a perfect and comfortable manner. Touching the point which Sir Aston Webb mentioned, viz. that the building might have been set further back: the reason nothing was done was, he believed, owing to no steps being taken in the matter by the L.C.C. until the work had proceeded too far. Had they taken the initiative at the proper time, that street would have been made wider than it is, and a fine opportunity would have been offered to show it up better than it could be shown until Great Smith Street was widened. He offered his congratulations to both architects for the very successful result of their building, and his own personal testimony and thanks for the happy relations which existed between them and the builders throughout the progress of the building. He had never carried out a building for any architect—and he numbered many architects among his personal friends—in which everything had gone with a greater swing and satisfaction from beginning to end. It was not entirely unknown in the course of work that a detail would occasionally be found not exactly to fit in with another detail, and not to fit in with the general drawing. But from the commencement to the finish of this building they had not to direct attention to any such variation.

Mr. Wm. WOODWARD [F.], in rising to support the vote of thanks, said he only wanted to refer to one or two subjects somewhat outside the Paper, though still connected with it and with the building. First, he entirely agreed with the idea of the Institute Council that at all events once in the session they should have a Paper by an architect on a particularly important building which he had erected during the year. He was sure they would all agree with him as to the value of such a Paper as this, in having before them the details of the building itself, offering them so much food for thought—perhaps also something for criticism—in regard to a building such as they might themselves have to carry out. But the special point on which he wished to comment was this. He happened to be a member of the Improvements Committee of the Westminster City Council, and more than once they had had before them the question of the Westminster Hospital site. Sir Aston Webb told them that

indirectly—not architecturally, at all events, but probably as a Governor—he had some connection with Westminster Hospital. They knew the Westminster Hospital portico and open areas, and it might have been imagined when the site was cleared and a new building had to be erected on it, that, at all events from a Hospital authority, an authority which should have some regard for the precincts of the building, there would have been no desire to extend the frontage of the site beyond the frontage line of their present building. But what they intended to do, unless it was prevented—

SIR ASTON WEBB: They do not intend.

MR. WOODWARD: If they do not intend, that is different. But he would tell them what plans the Westminster Council had had before them. In the drawings he had in mind they suggested that they should bring the main frontage of their building to the present line of the portico, and they had the power, under the London County Council Regulations, to carry out that main frontage to a height of 70, 80, 90, or 100 feet. If that were done, coming from Parliament Street, a large part of the fine building of which they had been talking would be hidden. He ventured to say that if there was any alteration in the line of frontage, it should not be in the extension towards Broad Sanctuary, but at least on the present main line. He hoped that would be the case and that we should use our best endeavours in that direction. One observation Mr. Lanchester made in which he did not follow him, namely, in the construction of the dome. He said he had an inner and an outer dome, and all their minds, probably, went to Sir Christopher Wren in that magnificent idea of his in the cupola and outer dome which gave St. Paul's such an excess of beauty over St. Peter's at Rome. He did not see that in the drawings, and perhaps Mr. Lanchester would tell them whether the dome they saw outwardly was the dome which could be seen from inside the building.

MR. HENRY POOLE said he was afraid he could not say very much about the strains and drains of the Wesleyan Hall, but he could say a few words, or tell them a story, about decorative exteriors. A party of Italians came to London, and on their way from the Abbey, in trying to find the Wesleyan Hall, they passed Wellington Barracks, and they thought, he supposed, that the austere character of the Barracks was in conformity with their idea of what a Wesleyan Hall should be. So they thought that must be the Wesleyan Hall. Passing on, they came to Tothill Street, and they saw a magnificent building all bristling with spears and lions' heads, and their remark was "Ecco! L'arsenale!" The only other thing he would mention was in regard to the brazen letters, "City and Midland Bank," which had been put on the panels. There were four big panels at the corners of the dome, which might be pointed out to Messrs. Beecham for their pills; and there was the round apex of the dome, which might

be usefully employed to advertise "Johnny Walker"!

MR. LANCHESTER, in reply, said that this vote of thanks must be considered to apply equally to his partner Mr. Rickards as to himself, as he had been merely the mouthpiece in respect of their joint effort. There were one or two explanations due from him. He was afraid he did not deserve the compliment which Mr. Woodward was anxious to pay him for having designed a dome inside and outside. There was a distance of fifty feet between the inside and the outside of the dome. A little explanation might be considered to be due with regard to the moot question of the frontage line, which had been touched on in the speeches. Before he had any connection with the building at all, he was told that when the Trustees first came into possession of that site and were first dealing with it, a strip of land was offered to the Westminster Council, to set back the frontage of the Wesleyan Hall; and at the time they did not see any reason for taking it. It was offered, he gathered, at the market-price of the Wesleyan site. Afterwards, he believed, when the building was in course of construction they said they would like to treat. [MR. WOODWARD: £15 or £25 a foot, which we did not see our way to do.] The point he was raising was not so much the question of the frontage, because that was now done with, but the frontage of Westminster Hospital. He did not think that was a matter which should fall on the London ratepayer; it was a matter for the nation, and therefore should be taken in hand by the Government, because there was enough ground there for ordinary purposes of traffic, but there was not ground for a decent square when the King came to Westminster Abbey. Surely that was a national matter, not one for the Westminster City Council or for the London County Council. The Government had the remedy in their hands by their ownership of the ground at the back. A strong appeal might be made to the Government to take action. With regard to reinforced concrete in the building, they had not regretted anything they had done in that way. They might do things differently if they started again, but they found it had fulfilled their expectations. They had varied their method; they were not wholeheartedly in favour of reinforcement; they did not do all the stanchions with iron sticks, but the important ones with lattice-work, filled in with concrete. That square [indicating one of the drawings] was a square full of concrete, and it was a compromise between reinforced work and steel work. The building included specimens of all shades of construction, from the ordinary steel construction to recognised reinforced work. In conclusion, he wished to mention a point which was a source of great gratification to Mr. Dove, their contractor—viz. that the building was carried to a height of over 200 feet without a serious accident occurring during the whole of its construction.

JOHN BELCHER, R.A.

FEW qualities are more to be admired than consistency. It means so much—reliability, calm judgment, fixity of purpose. Looking back through a vista of thirty-four years of friendship I can see all these qualities in the man whose death we all mourn to-day. Although Belcher was not a strong man in the sense in which we use the term, he achieved all that the strong man would achieve, by virtue of his quiet, blameless fixity of purpose, always unaccompanied with either bluster or temper. I have never known him swerve from his purpose by reason of any threat; he gained his ends by quiet insistence and determination. I could quote many instances, but this is neither the time nor the place to recount them.

Belcher's early bent was towards a Gothic treatment of architectural problems, with which I could not feel in accord. With the passage of time, however, he veered insensibly towards another style, which he assimilated with remarkable aptitude and of which he has been such an able exponent. I trace the change in his attitude to an immense admiration for Norman Shaw. The change came soon after he produced his design for the church in Maida Vale. This design was much admired at the time, and is undoubtedly the prototype of Sedding's Church of the Holy Trinity in Sloane Square.

The new style was developed when he made his design for the Institute of Chartered Accountants, in the production of which he expended great and loving labour. He told me, more than once, that every detail was worked out by himself. I believe that his first introduction to Norman Shaw happened when I met them on this building. Norman Shaw was immensely taken with the building, and his advocacy of Belcher's admission to the Academy dates I think from this occasion.

It was soon after this that Belcher and I started on our travels over England in search of examples for our book on the Later Renaissance in England. No pleasanter companion could be imagined. He was ever ready to acquiesce in all plans and to sacrifice his own convenience to mine. He made an ideal collaborator. These were the four years of my architectural life I enjoyed the most.

There was another side to Belcher's character that swayed him greatly, and that was his innate love and knowledge of music. Whenever he wrote on the subject of architecture he almost invariably brought in a comparison between the two arts, their rhythm and balance. He was gifted with a singularly pleasant and powerful voice, and his phrasing was charming. He himself attributed this to his knowledge of stringed instruments, especially the 'cello.

I should like to say, although myself a competitor, that I consider Belcher's the best elevation submitted for the completion of the Victoria and

Albert Museum. The long front would have been a great composition, though I cannot admire the *design* for the towers.

We suffer the loss, within a year, of both Belcher and Shaw, two of the greatest modern exponents of architecture. They leave two empty niches which cannot be filled. They belong to a phase of art now dead, for they both achieved their success outside the modern open competition system. It remains to be seen how this method will work—the men of tried ability against untried. It is my own personal sentiment that Shaw and Belcher have exerted a greater influence on modern architecture than any other architects of modern times—the former in domestic and the latter in civic architecture.

It is not generally known how great a service Mr. Belcher rendered to the Institute and the profession by carrying through the early negotiations between the non-registrationists and the Institute. He always regretted the breach that occurred in 1891, and after my return from America in 1902 he gladly adopted the suggestion which I made to him that all parties should unite on the common ground of education. Sir Aston Webb cordially endorsed this project, and with the able assistance of the present President of the R.I.B.A. the reunion was happily consummated.

I have seen a notice in a Building Paper saying that the advertiser was prepared to give instruction in competitive work, in Gothic, Renaissance, Classic, and Belcher style—a tribute to the man's genius in this direction. This is perhaps trifling with the subject, but it clearly shows what the commercial architect thought of modern styles with an eye to good business.

MERVYN MACARTNEY [F.].

THE "RESTORATION" OF ANCIENT BUILDINGS.

THE Quarterly Part of the JOURNAL for October carries far and wide the letter to *The Times* of the 26th August entitled "The Fallacies of Restoration." This question is one which has a constant practical issue, involving the expenditure of large sums, and the spoiling or conservation of work of a value that cannot be reckoned in figures. But a question of so delicate a nature can only be properly dealt with by careful consideration, and with wide knowledge. Hence, no excuse is needed for its discussion.

But this, to be of value, must be on the basis of experience, and it is as one having considerable experience of this kind that the writer ventures to express an opinion from the point of view of the actively producing artist.

Architecture may be compared to the land we live on. The living forces of Nature build up continents and isles, yet no sooner are they there than

the same forces pull them down to build up others. So the time-spirit, which formerly covered France and England with abbeys and churches, castles and manors, has wrecked them all, and the arts complementary to architecture exist only in broken or faded remnants which speak to the cultivated mind of the glory and beauty which once existed. That is all we have! Where even is the once glorious Rome except in its broken remains and museum specimens?

Countless buildings of mediæval times remain in a more or less complete state of preservation. And now that after several centuries of neglect and contempt they are again valued, it is asked, can they be left as they are? Taking up space under the sunshine, they are, if not destroyed, put to use; and consequently the wrecked remains of past centuries cannot and will not be left in the state of toothless and fleshless skeletons for the sake of the æsthetic enjoyment of a few visitors. Nor is there any valid reason why they should be if they can be properly dealt with.

We know the poetical beauty of an unrestored ancient building. For many years all our available time has been spent in haunting such. We know the pain of seeing a once beautiful building spoilt by some modern well-meant barbarism. But is not this exactly parallel to a beautiful site being spoilt by some ill-conceived building? That too, alas, is common enough; but we do not conclude it is wrong to build! So may there not be a right kind of restoration as well as a right kind of building—one which is a restoration, and not a deformation?

A long experience in Central Europe, where some twenty years ago ancient buildings began to receive attention, as they did in England long before, has given me opportunities of seeing cases of both wise and unwise restoration; and this arose from my being asked to participate therein by placing stained glass in the window openings which had been mostly filled with unsightly wooden frames and ordinary window-glass. The memory of buildings so lighted, with a horrible system of stove-pipes as sole decoration, stands out in contrast to places now cleared, with every vestige of antiquity preserved with care and touched no more than was necessary, the windows filled with glass which it has been a constant aim to bring into the fullest possible harmony with the building, without slavish copying, and without destroying that poetic beauty for others which we have ourselves so keenly enjoyed. Such a building is that of the Abbey of Romainmotier (mentioned in Fergusson's Handbook), on the Simplon route between Lausanne and Pontarlier. The Castle of Chillon on Lake Lemán has been restored in the same spirit.

It is certainly true that in England many churches, and perhaps all the cathedrals, have been dealt with in the way which has drawn such scathing strictures from an eminent critic. It

is to be regretted that so much was done at a time when society was quite unprepared to deal with our national treasures properly. France too has gone through the same period, and Germany is in it at the present time. It is folly to think that anything good can come of completing old work by the pseudo-arts of the modern commercial system, produced on an industrial basis. But this resulted from a movement of thought in the nineteenth century in which every part of life was affected, and it is part of the history of our times. It is by more wisdom and a higher ideal, and not by inaction, that it must be dealt with. And we, the artists of to-day, can see, and know right well, what perhaps scarcely anyone fifty years ago was able to see, and which so many even to-day do not see. The educated artist will think and act absolutely in the spirit of the Society for Preserving Ancient Buildings, barring the tendency to inaction. For there is the fact that these buildings have to be used. And when one sees, as is so often the case, Gothic buildings which were designed with the idea of all the windows being filled with coloured glass, now in a blaze of raw light (as, for instance, the Cathedral by Nevers or that of Lausanne), one knows that in this state it is not Gothic architecture at all, but a mere skeleton thereof.

We freely admit that "a copy of a work of art is not the same thing as a work of art," and that "a stained-glass window, if not a work of art, is nothing." But if, for other reasons than its own value, the use of stained glass is desirable, then let us avoid "copies" also, together with stained glass which is not art in the true sense! That this may cut out the ecclesiastical art shop may be true; as a phenomenon which has served its time, this can be allowed to disappear. But that does not affect the question at all, for it is a certain fact that ancient stained glass was produced by men who, as practical craftsmen and artists, worked in a small way, scattered all over the country. To return to the ancient manner—a course we ourselves have realised—is the solution of the problem as far as the actual production is concerned. To work thus in the fresh air and sunshine of the country, with the flowers of the field and the lowing of kine around, makes it relatively easy to work materially, as a poet writes in his garden. In fact, properly, all art is poetry, the means of expression alone differentiating one form from the other.

We ask, then, is work executed in such a spirit unfit to replace what the time-spirit has destroyed?

It is clear that what is produced will depend on the knowledge and ideas of the artist. We are living in an epoch when popular art has been established on an ideal of exact imitation of Nature. In mediæval times no such ideal existed. The aim was essentially decorative, *i.e.* ornamental and didactic, and imitation was subordinated to design. Drawing was never exact, and was gene-

rally mere suggestion or a symbol of reality, as Mr. Harrison Townsend has rightly shown was the case for mosaic (JOURNAL R.I.B.A., 23rd March 1901). If then even the best-intentioned artist takes up the mediæval ideal of decoration in this modern method, he must spoil his work, and numberless instances of this, in England and on the Continent, could be adduced. One of the most glaring cases is that of the west window of New College Chapel, Oxford, by Sir Joshua Reynolds. This he himself admitted to be a failure.

But some of us have, from the very start, taken mediæval art as our ideal, and *design* and not imitation is our method. And in such circumstances it is the simple truth to say that mediæval design is a language which is as much our mother tongue as it was for the mediæval men themselves—for they were trained to write on the lines of traditional models coming from the East originally, and did not invent a language for themselves. Hence we can think for ourselves though speaking in this particular language—and even as one can speak alternately in French or English and yet be perfectly sincere, so one may be sincere in using a language no longer in common use, but which is, where familiar, as effective as if it were. This view applies to all the “divers arts” applied to architecture; they can all fail for want of something the workers ought to have.

If one wants to see an example of a contrary spirit, it can be found in the Cathedral of Fribourg in Switzerland. Here a modern artist has had a free hand to design the stained glass, and it has been executed without regard to ancient tradition. It is palpably sincere. Whether one likes it is a matter of taste and judgment. Some do, and some do not. Any way, the building seems to exist for the glass. There are then three courses. One is to do nothing; the others are to do something, wrongly or rightly.

CLEMENT HEATON.

P.S.—The above lines were written at Dijon in Burgundy. The Church of Notre-Dame in that city is well known, and it is now filled with glass by the studious Didron executed some thirty years ago. It may be admitted that the technique is not all that it might be, but the church is in daily use, and the general effect is quite satisfactory. The design is well understood, and had it been on modern lines the church would have been spoilt, or had there been no glass at all the white light would have ruined the interior. There is no reason why the technique should not have been all it should be, and in that case a true restoration would have been effected, which was the truly wise course. The average French church with its pictorial transparencies in modern taste, or still worse with its “archæological” windows, is best avoided. Neither are properly speaking “shams,” but they are both equally unacceptable to those who know the ancient glass.

C. H.

REVIEWS.

SUNLIGHT.

The Orientation of Buildings, or Planning for Sunlight.
By William Atkinson, Fellow of the Boston Society of Architects. La. 80. Lond. & New York. 1912. 8s. 6d.
[Chapman & Hall, Limited.]

The first requisite for healthy buildings, and for hospitals in particular, is a plentiful supply of sunlight on and around them, this being second only to an abundant access of air. The importance of sunlight, especially in relation to hospital planning, cannot be overrated, and is ample justification for Mr. Atkinson's book, though his third chapter is rather an essay on the disposition of hospital planning in general than on the orientation of buildings in particular.

The importance of sunlight is indicated by reason of its germicidal power in diminishing the possibility of infection, and ultimately killing organisms lying quiescent in the material of a building or in the contents of a room or the surfaces thereof. Continuous exposure to direct sunlight will kill any organism by the chemical power of the ray, i.e. the blue end of the spectrum. Hence, as Sir Douglas Galton has said, “fresh air, to be of full value to health, must be sun-warmed, sun-penetrated air. The sunshine of a December day has been shown to kill the spores of anthrax.”

Mr. Atkinson divides his book into four chapters, in which he deals with the astronomical aspects of the question, the elements of astronomy being applied as far as necessary for the apparent motion of the sun and the angles of light at the various seasons. Many illustrations are given showing the projection of the angles of light. Shadow diagrams are fully demonstrated in various types of building plans, showing the visual angle of windows and the quantity of sun which they admit, together with the heating effect of sunlight.

The ground plan of a Swiss chalet illustrating the customary orientation is shown, with a frontal aspect of S.E., large windows being brought up to the N.E. and S.W. angles of the front, thus securing the rising E., the S., and the setting W. Written from the American side, the whole subject is dealt with in regard to latitude, which does not materially affect British and Continental readers.

In chapter iii., which is devoted to hospital planning in general, the author refers to the vexed question of orientation and quotes varying views. These, perhaps, will scarcely disturb the settled view generally held in this country in favour of approximating the long axis of a ward to N. and S., the latter being the end of the ward. Sunlight, however, is not the only consideration to be dealt with in selecting a hospital site; other important factors to be taken into account are the general lay of the land, the subsoil, and the conditions which arise from exposed positions or prevailing winds.

The volume concludes with a chapter upon streets, which should make a strong appeal to American conditions in relation to skyscrapers.

WILLIAM A. PITE [F.].

BUCKINGHAMSHIRE HISTORICAL MONUMENTS.

Royal Commission on Historical Monuments (England).—An Inventory on the Historical Monuments in Buckinghamshire. Vol. II. North Buckinghamshire. 40. Lond. 1913. Price 16s. 6d. [His Majesty's Stationery Office.]

The Third Interim Report of the Royal Commission on the Ancient and Historical Monuments and Constructions of England deals with the northern half of Buckinghamshire. Following the scheme of the earlier volumes, the work contains an Historical Summary covering the whole of the county; a Sectional Preface which, under subject headings, calls attention to any particularly interesting examples mentioned in the Inventory; an illustrated Inventory, with a concise account of the monuments visited; a List of Monuments that the Commissioners have selected as especially worthy of preservation; a Glossary of Architectural, Heraldic, and Archaeological Terms; a Map showing the topographical distribution of the scheduled monuments, and an admirable Index. Under the heads of parishes, arranged alphabetically, a list of their respective monuments is given in the following order:—(1) Prehistoric monuments and earthworks; (2) Roman monuments and Roman earthworks; (3) English ecclesiastical monuments; (4) English secular monuments; (5) Unclassified monuments.

It was in the seventeenth century that Buckinghamshire rose to a position of political importance which it never attained either before or since, and the excellent Historical Summary by Mr. W. Page furnishes a very interesting account of the stirring events in the county during the Civil War. Its sudden leap into prominence was due to the fact that it was the home of many of the most prominent persons engaged in the political struggles of that period—John Hampden, Cromwell, and many other of the leading Parliamentarians and Royalists were Buckinghamshire men. Hillsden House, the seat of Sir Alexander Denton, a Royalist, was besieged and taken by Cromwell, and traces of the fight remain in the bullet-holes made in the church doors, and in the uneven nature of the ground on the opposite side of the road at the west end of the church, which marks the defensive works of the Royalists. Although the Civil War was answerable for much damage both to ecclesiastical and secular buildings, yet the condition of the former was anything but satisfactory before the war began. A visitation of 1637 shows the churches to have been in a lamentable state; the windows of nearly all of them were broken and "dammed up"; the roofs let in rain, and at Thornton an

elder-tree grew out of the top of the "steeple" or tower. The principal complaint, however, was regarding the great family pews which existed in every church and obscured the view of the chancel. At Dorney, Sir James Palmer's seat was "three yards high or thereabouts," and pews of about the same height were reported from Wooburn, Brill, and Penn, while seats of from four to seven feet in height existed in almost every church in the county. Perhaps the most remarkable was that of Sir John Parsons in Langley Marish church, which was built on the roof of a vault nine steps above the level of the floor, and was seven feet high; it was provided with eight lattice windows, and had a doorway into the church and another into the churchyard.

The northern half of the county contains 126 parishes and 1,222 monuments, as compared with 102 parishes and 1,535 monuments in the southern half. With a few exceptions the churches do not reach a high level of architectural merit. Only three contain definitely pre-Conquest remains, though the plans of many of the later buildings may be based on existing pre-Conquest foundations. Wing possesses an extremely interesting and practically complete church of the tenth century or even earlier date, with a polygonal chancel and crypt. In Lavendon Church the original Saxon tower, nave, and part of the chancel are of mid eleventh-century date. Of the post-Conquest churches, four date from the second half of the eleventh or the beginning of the twelfth century, at Lillingstone Dayrell, Newton Blossomville, Ravenstone, and Thornborough. Of these Lillingstone Dayrell, which retains an original nave with arches opening into the chancel and tower, is the most important. Stewkley furnishes the most complete example of a mid twelfth-century church and is particularly rich in detail; the tympanum of the west doorway, with its long central keystone, is possibly unique. The large cruciform church at Ivinghoe is an excellent example of thirteenth-century work, and the foliated capitals of the nave arcades are beautifully carved. Building in the fourteenth century is well represented. Olney and Whitechurch have large churches almost entirely of this period, and Olney is the only example in the county (except Hanslope) with a spire. Cublington has a small but complete church of early fifteenth-century date, and a brass records that its first rector died in 1410. At Hillesden, Maids' Moreton, and North Marston are splendid examples of late fifteenth-century work. Less than half the churches included in the Inventory have roofs of earlier date than 1700, and most of the old roofs are of the fifteenth century.

The six chapels included in the Inventory have been converted to secular uses. The chapel at Bradwell Abbey is now used as a fowl-house and lumber-shed, while that at Creslow is a coach-house and storehouse. The chapel at Lillingstone

Dayrell has been converted into cottages, while that at Lislecombe Park, Soulbury, is a billiard-room, and that at Chelmscott Manor House, also at Soulbury, now forms part of the dwelling-house.

There are not many good illustrations of domestic planning, but an example of peculiar interest is seen in Creslow Manor House (c. 1330), which retains the greater part of the hall and the whole of an elaborately designed solar wing. There are also a few small houses, and cottages, such as Church Farm, Wingrave, and a cottage at Cheddington, originally constructed in bays with trusses of a very simple type, which may date from an even earlier period. Twyford Vicarage and the Priory, Whitechurch, are houses of a moderate size dating from the fifteenth century. Doddershall House, Quainton, is part of an early sixteenth-century building of the courtyard type, as is also Castle House, Buckingham, of c. 1500, apparently with the hall on the first floor. The finest house of late sixteenth-century date is Gayhurst House, which internally, however, has been considerably altered. The only secular roofs of interest are the traceried and carved roof of the fifteenth century in a barn at Rectory Cottages, Bletchley, the remaining central truss, also of the fifteenth century, in the Priory, Whitechurch, and the remains of the queen-post roof of c. 1500 at Castle House, Buckingham. Some ceiling-beams at Castle House are also noteworthy; the fireplace is dated 1619.

The bridge across the Ouse between Buckingham and Thornborough is the only example mentioned in the Inventory. It was built of stone in the fourteenth century, but has been much rebuilt and restored with stone and modern blue bricks.

The present volume, though dealing with only a portion of a county, and one comparatively poor in antiquarian remains, consists of 458 pages, in addition to a large number of plates, and is the largest of the series so far issued. One can well conceive that for some of the counties the Inventory may run into three, four, or even more volumes. The one under notice is embellished with over two hundred illustrations, many of them full page, which are a credit both to the photographer and the printer.

THE UPPER NORWOOD ATHENÆUM.

The Record of the Winter Meetings and Summer Excursions, 1912. Vol. 36. Edited by Theophilus Pitt.

The Upper Norwood Athenæum issues a well-printed, illustrated volume consisting mainly of monographs—two or three of them written by members of the R.I.B.A.—of old buildings visited by the Society on some of their personally-conducted rambles to places of antiquarian and general interest. The Society congratulate themselves on having architects enrolled amongst their members, and it is the contributions to the volume by architect members that seem particularly to call for notice from architects. In the opening chapter

reviewing the work of the Society for the past season it is stated that "with the advent of members having a professional knowledge of architecture the standard is being continually raised." As this upward movement continues one may venture to hope that in some future issues the contributions by architect members will come to be illustrated by the architect's own method of displaying for study the form and disposition of a building, viz. by scale-plans, if not by sections also, instead of relying on photographs and small sketches alone, as in this volume. How difficult must be the attempt to elucidate at all clearly, without a plan, the fabric of a complex structure such as an old church of average interest is shown in the accounts of old churches here attempted by architects. A plan of each building, like the firmly drawn diagrams to scale that so neatly indicate the life-story of buildings in the volumes of the "Victoria County History" and in the inventories of the Historical Monuments Commission, would at once have cleared the view for the uninitiated and focussed the interest of students who cared to learn. The production of such a plan is peculiarly an architect's work to do, well worth an architect's doing. Putting up with anything less than this, playing round the subject with photographs and sketches, however good, and quotations, ever so apt, is to stop short of accounting for the building itself as an organic structure, leaving one with but a dim conception of it as a whole. In such a case the plan is hardly the illustration for an architect to leave out, whatever further illustrations he may select.

Several of these Papers descriptive of old churches and other buildings visited, written by members of the Society whose names do not happen to be distinguished by letters denoting membership of the Institute, comprise a mass of well-digested information bearing on their respective subjects, evidently compiled with much care and thoroughness by students who take their work seriously and pursue it with ardour.

WALTER MILLARD [A.]

CORRESPONDENCE.

The Comacine Masters.

*Drianteroft, Milford on Sea, Hants :
14th November 1913.*

To the Editor, JOURNAL R.I.B.A.,—

SIR,—In his Opening Address on Monday, the 3rd inst., our President, according to the JOURNAL report, made use of the following words:—

"I seem to detect the trace of an ingenious theory which a few years ago was spun round an obscure association known as the Comacine masters."

The words were spoken in connection with the criticism of an article in the *Morning Post* by

Mr. March Philipps, and were left without further explanation as to why they were uttered.

Whether, therefore, the "ingenious theory" is one spun by the authoress of *The Cathedral Builders* (Leader Scott), by Signore Marzario, Signore Rivoira, or myself in my recently published book on the Comacines I do not know, but the impression left on reading the sentence is that an unimportant body of men scarcely worth a passing thought has been invested with a rather attractive but amusingly mythical association, and that, moreover, the whole being a thing of the past, it is hardly worth any consideration at the hands of the architectural student.

Two things, therefore, I desire to point out. One is that abundant evidence exists to show that the Comacine masters were anything but an "obscure association"; the other, that their influence upon the architecture of Western Europe, which, I presume, must be the "ingenious theory" referred to, is indeed a very well defined fact.

As to the obscurity of the Comacines, may I say that since I wrote my little book I have spent, in further pursuit of its subject, a considerable time in Italy, and have found such a mass of additional information as to the importance and influence of the Comacine masters as is quite astonishing? They have undoubtedly left their mark in nearly every important city of Italy, and not there alone, but in France, Germany, and our own Islands.

Details here would be out of place—such I hope to give before long—but that the Comacine masters were called back to Rome and worked there for some centuries to an extent little supposed by many, I may mention in illustration of what I claim for them. And I may add that so far as "theories" are concerned, I have not as yet found anything which, except in quite minor points, traverses the conclusions to which I have been led by the study of these masters and their work.

So far as the matter being a thing of the past is concerned, I may state that at the present time Professor Monnerit de Villars is engaged on a work which I believe he intends shortly to publish, and on which he has been employed for a considerable time, in connection with which, and under the auspices of the Italian Government, he is conducting excavations at Comacina, all of which promise results which should be important.

If I have misinterpreted the President's words I am sorry, but since they are important as coming from the President of the Institute, and will probably have been read by, at any rate, most members of that body, I regret to have to suggest they are scarcely fair to the Comacine masters or to the students of their history.—Yours faithfully,
W. RAVENSCROFT, F.S.A. [P.]

Mr. B. M. Sullivan [A.] has been appointed Consulting Architect to the Government of the Punjab on the nomination of the President R.I.B.A.



9 CONDUIT STREET, LONDON, W., 22nd November 1913.

CHRONICLE.

The late John Belcher, R.A., Past President, Royal Gold Medallist.

Formal announcement of the death of Mr. John Belcher, R.A., which took place on Saturday the 8th inst., was made to the Institute at the General Meeting of Monday the 17th inst.

Mr. E. GUY DAWBER, Hon. Secretary, said:—It is with deep regret that I have to announce the decease of Mr. John Belcher, R.A., our distinguished Past President and Royal Gold Medallist. Mr. Belcher's connection with the Institute dates back to the year 1869, when he became an Associate. He was elected a Fellow in 1882, served the Institute on the Council and various Committees, and was called to the Presidential Chair in 1904, holding the office for two years. As President of the Institute it fell to him to preside also over the International Congress of Architects held in London in 1906. Those of us who took part in the Congress will recall the admirable manner in which he discharged the onerous duties of his position, and the self-sacrificing devotion with which he threw himself into the task of making the Congress a success, not only delivering the very able Opening Address at the Guildhall and presiding at the principal meetings, but contributing also a well-thought-out Paper on the subject of the Education of the Public in Architecture. One recalls with gratification the tribute paid to him by the various architectural associations of the Continent and the United States represented at the Congress, who showed their appreciation of his conduct of the proceedings by bestowing upon him the Honorary Membership of their respective societies. I need not remind the Meeting of his distinguished services to our art. His architectural achievements are the admiration of us all, and nowhere has the judicious use of sculpture and painting been more successfully applied. The building of the Institute of Chartered Accountants is a standing monument to the happy results that can be attained by the sympathetic collaboration of the architect, the sculptor, and the painter. The estimation in which his work is held was demonstrated in 1907, when by the unanimous vote of his brother-architects he was presented with

the Royal Gold Medal for Architecture. Mr. Belcher, too, had won well-deserved recognition by his literary work. The exhaustive volumes on the English Renaissance which he produced in collaboration with Mr. Mervyn Macartney are universally known and appreciated. His more recent work, *Essentials in Architecture*, was published with the laudable object of stimulating popular interest in architecture and of teaching the public how to distinguish what is good and what is bad in the art. I will not detain the Meeting further; I trust that we shall have a full Memoir in our JOURNAL at an early date. I beg leave now to move the following Resolution:—

That the Royal Institute of British Architects desires to express its high estimate of the valuable and productive labours of its late distinguished Fellow and Past President, Mr. John Belcher, R.A., in furtherance of the advancement of architecture, and of the eminent services he rendered the Institute as Member of Council and President; and that the Institute do record its sorrowful regret at his demise, and do offer to his widow and to his brother, Mr. Arthur Herbert Belcher [A.], an expression of sympathy and condolence with them in their bereavement.

Professor BERESFORD PITE [F.], in seconding the motion, said: Mr. Belcher himself had an ancestral connection with the Institute, and with the profession. His father was very well known for the refined classicism of his work, and had a high business reputation, which our late distinguished colleague, in the somewhat critical circles of the City, maintained at its highest point. Of the warmth of his nature, the character of his sympathy, of his real enthusiasm for art, of his modesty, the central part of his character, of his great refinement, of his ingeniousness in design, and ingenuousness in charm, all of us who knew him were very conscious. There was, besides this personal charm, a deep underlying charity of nature: he was one of the kindest men you could meet, and again and again one has marvelled on finding the liberality with which he met any appeal to his sympathies or kindness. His artistic nature was many-sided. He was a member of an old and very distinguished musical circle which used to meet under the guidance of a name that is possibly almost forgotten now—the late Professor Ella. His friendships extended not only to his professional brethren but, I think it is worthy of remark, to all those who were brought into business contact with him. The leading builders of the day who were brought into relationship with him became his friends. I might instance his friendship with the late Mr. Howard Colls as an instance which is not at all singular. All who were brought into contact with him felt the charm of his subduing friendship; a friendship which made it impossible to feel ground for com-

plaint in anything he said or did. I venture to say that nothing he ever designed or ever said was characterised by an error of taste. His art was, like himself, sympathetic: his personal sympathy was with the picturesque and romantic, rather than with the severe and the classic—possibly a pleasant contrast to the somewhat severe classicism of his early training. Belcher's was a nature which was responsive to all expression in art, and was easily enthusiastic about it in all its forms; and young men brought into contact with him felt the stimulus of his sympathy and the encouragement of his friendship. He was always feeling his way to a sympathetic originality, but never anxious to be peculiar, and always moving where he felt life was leading; of all modern architects he, most characteristically, may be said to have felt the breadth of Art as a whole, his sympathy being equally with the sister arts of painting, sculpture, and the crafts, as with his own art of building. In connection with sculpture he stands in the position of a lover, and he gave it always a position of dignity and importance. The late Mr. Armistead was one of his oldest friends; and Mr. Hamo Thornycroft was I believe a schoolfellow and a devoted friend to the end. He early gave important commissions to that talented sculptor Harry Bates, and Mr. Drury and others worked with him subsequently. He enjoyed beauty in all its forms, in all the arts, and this sympathy is reflected in his designs—a sympathy which, in the early days, emulated Burges and Waterhouse, and had a constant enthusiasm for his dear friend Norman Shaw, and a hearty place for another close friend who went before, J. D. Sedding. With regard to the Institute, our loss is an especial one. He came somewhat late to the counsels of the Institute, and when he was in the chair we were struck with his graceful and clear elocution. He was always extending the artistic sympathies of its body, and I venture to suggest that his Presidency, of all modern Presidencies, is notable for the personal influence which he exercised in connection with it. If you turn to the KALENDAR and glance at the list of Fellows who became Fellows without passing through the Associateship during the years of his office, you will find these names, among others—names which I am disclosing no secret in saying we owe to Belcher's personal influence and the peculiar position which he occupied with regard to both the art and profession of Architecture. Our own President, Blomfield, joined under Belcher's Presidency in 1906; our Vice-President Ernest Newton joined at the same time. This notable year gathered into the sympathy and work of the Institute Professor Lethaby, Professor Prior, his friend Macartney, Gerald Horsley, May, Ricardo, Thackeray Turner, Troup, Ambrose Poynter, Lutyens, and that group of men who were associated with Belcher as friends in the Art Workers' Guild, and whose accession to this Institute has been of the greatest importance

and value. And I had the honour of having Belcher connected with the work of the Royal College of Art, through his appointment as an Advisory Member of the Council of the College for Architecture. His genuine sympathy with students and his enjoyment of their efforts and work were remarkable—one must not say unexpected, it was so truly like him. Reference has been made to a work of his which will probably live for many years as a fundamental cause of fame, and that is his fine work on the Later Renaissance, in which he collaborated with Mr. Macartney. As a work it is one of the greatest influences of our day: it is, through every architectural school, witnessing to the importance of that particular type of work which he practised. At the end he passed quite swiftly away. His is a personal loss, which all of us who knew him feel very deeply. The Institute has lost a friend, a noble and sweet character whom we regret, and we venture, with deep sympathy, to express our condolence in this vote.

The motion being put from the Chair, members signified their assent upstanding in silence.

The Henry Jarvis Travelling Studentship.

The subjoined conditions for the Architectural Scholarship at the British School at Rome, offered by the Commissioners for the Exhibition of 1851, apply also to the Henry Jarvis Travelling Studentship. Competitors must be either Associates or Students of the Royal Institute of British Architects. The Henry Jarvis Studentship is of the value of £200 a year, and is tenable for a period of two years at the British School at Rome:—

CONDITIONS.

Candidates must be British subjects, and less than thirty years of age on 1st July 1914.

The Competition, which will be conducted by the Faculty of Architecture of the British School at Rome, will be in two stages:—

A. An Open Examination.

B. A Final Competition, open to not more than ten candidates selected from those competing in the Open Examination.

A. THE OPEN EXAMINATION.

Competitors should notify the Honorary General Secretary, British School at Rome, 54 Victoria Street, London, S.W., of their intention to compete in this Examination as early as possible, and in any case not later than the 24th January 1914, and with such notification must enclose a certificate of birth or a declaration as to age and nationality, duly attested by two responsible persons.

The subject for this Examination will be AN ART GALLERY, situated in the public park of an important provincial town.

The building to have a frontage towards the south of 250 feet (on which frontage is to be the principal entrance), with a depth of 100 feet, and to consist, on the ground floor, of a central top-lighted Hall for Sculpture, with side-lighted galleries around it. The first floor to have top-lighted galleries. A lower floor for reserve exhibits and stores may be provided, and the design may include any terrace, steps, and architectural adjuncts thought necessary for the completion of the design.

The size given may be exclusive of any architectural projections, such as porticoes or other architectural features.

The drawings required are:—

Plans of the two principal floors.

Front and side elevations.

Longitudinal and transverse sections—all to a scale of $\frac{1}{4}$ inch to a foot.

A detail of an important portion of the front to $\frac{1}{4}$ -inch scale.

A perspective in which the building shall measure 18 inches.

A short descriptive report must accompany the design.

The general drawings may be finished in ink or pencil, and the view in any manner at the competitor's discretion.

Each design must bear a motto, and must be accompanied by an envelope enclosing the name of the competitor.

Drawings must not be executed as part of a school course, and the competitor must submit a written statement to the effect that this regulation has been complied with, together with a declaration that the work has been done by his own hand.

The drawings, together with the above-mentioned documents, must be sent to the Hon. General Secretary, British School at Rome, c/o The Secretary, Royal Institute of British Architects, 9 Conduit Street, W., and must reach him on or before 31st January 1914.

B. THE FINAL COMPETITION.

This Competition will be held *en loto* in London, and particulars regarding it will be announced hereafter.

The successful candidate in this Competition will be recommended for appointment to the Commissioners' Scholarship.

GENERAL.

The Faculty reserve to themselves the right, at their absolute discretion, to alter any of the conditions, periods, dates or times herein specified, and to decline to hold the Final Competition, or to select any candidate for it, or to make any recommendation for the Scholarship.

The Faculty also reserve to themselves the right to publish photographic reproductions of, or to exhibit, any of the works submitted by competitors.

British School at Rome: Faculty of Archaeology, History, and Letters.]

The Annual Report to the subscribers of the British School at Rome, just issued, states that the improvement, both in the number of the students and in the quality of their work, which was noticed in the last Report, has been more than maintained during the present season. There were over eighty students and Associates on the books of the School, an increase of some twenty on last year's figures. As soon as the new building is complete the advantages of a hostel will be available for students, and it is hoped that the studios, with which special progress is being made, will be finished as early as October 1914, in order to receive the Scholars of the Faculties of Architecture, Painting, and Sculpture. Meanwhile, so long as the premises in the Palazzo Odescalchi are used for the general purposes of the School, the Faculty of Archaeology, History, and Letters will continue to admit all the students. A new feature of the Session has been the advent of several South African architectural students. Mr. Herbert Baker's generosity in founding a studentship for

South African architects has, no doubt, been the stimulus, and he himself visited Rome and the School during February. It is hoped that it may be possible to arouse a similar degree of interest in the other parts of the Empire. The visit of Mrs. Arthur Strong, the Assistant Director, to Canada, where she has undertaken an extensive lecture tour, should be productive of good in this direction, and the Director, Dr. Thomas Ashby, will join next year in the visit of the British Association to Australia. Dr. Ashby has continued his work on the Campagna and completed the manuscript of the text to the map of the environs of Rome, which was mentioned in the last Report. Mr. J. S. Beaumont (Student 1911, 1912) has spent the summer in Italy in company with Mr. Gordon Leith (Herbert Baker Student), visiting Modena, Bologna, Verona, and Venice. He then examined the Renaissance drawings relating to the Forum of Nerva in Rome, and reduced these to a common scale, afterwards working on the final drawings of his reconstruction, which occupied him for the greater part of the winter. Mr. Beaumont seems to have arrived at new and important results as to the plan of this Forum, which will be published in the next volume of the *Papers*. Miss A. E. Conway (Student 1911, 1912) spent four months in Rome and elsewhere in Italy, and continued her studies in Roman art and architecture, with a special view to the arrangement of the chronological collection of photographs which she is forming in conjunction with her father, Sir Martin Conway. The Herbert Baker Student, Mr. G. Gordon Leith, has devoted especial attention to the works of Sanmichele in Verona and to the system of vaulting in Bologna. He further spent six months in Rome in completing his restoration of the palace of Domitian, and has prepared a set of drawings which will be exhibited at the Royal Institute of British Architects. He has also prepared a thesis on the subject.* Mr. Christian Mallet has worked at the chronology of Renaissance buildings in Rome, intending to compile a chronological chart for the use of students of the School. Mr. W. Harding Thompson, holder of the Holt Travelling Scholarship in Architecture at Liverpool University, devoted himself especially to the studies of the works of Baldassare Peruzzi in Rome and elsewhere, while in the northern towns he paid special attention to the works of Sanmichele. Miss Lindsay Williams, Gold Medallist and Travelling Student of the Royal Academy, worked for two or three months in Venice, especially on the exterior of S. Marco and in the Baptistery. During a five months' stay in Rome she was mainly occupied in copying Raphael's frescoes in the Stanza della Segnatura in the Vatican. In rendering their acknowledgments for donations, the Faculty specially mention contribu-

tions from present students as showing an appreciation of the efforts of the School on behalf of its members. At the same time the Faculty desires to maintain the principle that no charge shall be made to Students and Associates.

Ramsden & Carr v. Chessam & Sons: House of Lords' Decision.

In my previous comments on the decision in this case before the Court of Appeal in the *JOURNAL* of the 10th May 1913, I called attention to the distinction it necessitated drawing between obvious facts and legal proof, seeing that it was held that a builder might be actually well aware of the firm by whom goods intended for use in, and delivered to, a building were supplied, and yet be legally ignorant to the extent of successfully declining to pay for them. The result of the litigation up to that decision was that two learned Judges were for, and two against, the apparent anomaly. The case has now been carried to the House of Lords, with the result that the anomaly has been removed and a final decision more satisfactory to the lay mind has been arrived at. [See report, pp. 59-60.] The cost of the machinery in the breaking of the small nut must have been very disproportionate. The case, however, is of considerable value to the profession owing to the side-light it throws upon the architect's proper procedure when selecting goods from merchants for use in the erection of buildings under his superintendence. This has been fully set out in my previous comments to which I have referred above.

EDWARD GREENOP [F.].

Mr. St. John Hope's Monograph of Windsor Castle.

The proprietors of *Country Life* announce the publication in a few days of a fine architectural monograph of Windsor Castle by Mr. W. H. St. John Hope, Litt.D., D.C.L. More than fifty years ago a scheme was drafted with the approval of Queen Victoria and the Prince Consort for the publication of an architectural history of Windsor Castle, under the joint editorship of John Henry Parker and G. T. Clark. To this end considerable collections of prints and views were made, and a large number of wood blocks was engraved by Orlando Jewitt from special drawings by C. A. Buckler. But the death of the Prince Consort in 1861 and other causes led to the project being indefinitely postponed. Shortly before the death of Queen Victoria the whole of the collected material was placed in the hands of Mr. St. John Hope, who was subsequently commanded by King Edward VII. to write a complete and authentic History of the Castle. Owing to the magnitude of the task the work could not be finished during the late King's reign, and the Royal command was graciously renewed by King George V. After nearly twelve years' labour the History has now been completed. During the last twenty years a vast amount of documentary matter which was not accessible to the

* Fuller details of Mr. Gordon Leith's studies during his studentship appeared in the last number of the *JOURNAL*.

first promoters of the work has become public, and the study of earthworks and of military architecture has advanced so much that earlier views have been wholly reconsidered. The history of Windsor Castle needed, therefore, to be approached from an entirely new point of view, and for the first time its gradual growth can be followed reign by reign from the earthwork stage to the wonderfully picturesque group of buildings which it presents to-day. The edition is to be strictly limited to 1,050 numbered copies, of which some 300 are already subscribed, and in no circumstances will the book be reprinted. It will be illustrated by reproductions in colour of drawings by Paul Sandby; by a large number of collotype plates reproducing a unique collection of original drawings, engravings, and photographs which show the Castle at every stage of its development; as well as by woodcuts prepared by the engraver, Orlando Jewitt, for this History when first projected. The work will be issued in two imperial quarto volumes, together with a portfolio containing a reproduction of Norden's View of Windsor and a complete series of plans, specially printed in fourteen colours, which show the dates of all the buildings and their successive changes.

New Work by Mr. Francis Bond.

The Oxford University Press will publish in a few days an important work by Mr. Francis Bond [*Hon. A.*], author of *Gothic Architecture in England*, under the title of "An Introduction to English Church Architecture." The work, which is in the nature of an *édition de luxe*, running into 2 vols. 4to., deals in particular with the history of the parish church in villages and towns, and contains 1,400 illustrations, mostly to large scale.

Suggested British School at Cairo.

Mr. Bryce, at the annual meeting of the British School at Athens, recently held in Burlington House, suggested that, following the precedents set at Athens and Rome, a school might be formed for the study of the Musulman world. We were responsible, he said, for the good government of an immense Musulman population and came in contact with the Musulman world at many points. It was extremely important, not only for the purposes of history and learning, but for practical purposes, that we should have the fullest comprehension of Islam, and all that it meant, with its relation to Western civilization. Would not Cairo be a good place to plant a British School which should do for the Musulman world the same kind of work as the Athens School was doing for the Hellenic? We had the advantage of holding a position in Egypt which would enable us to advance studies there, and he thought there could be little doubt that material support, such as the School in Athens had obtained, would be forthcoming, not merely from England, but from the revenues of Egypt, and, he believed, from the

revenues of India also, because the work which would be done would be for the Musulman world generally.

THE EXAMINATIONS.

The Statutory Examinations.

An Examination of Candidates for the office of District Surveyor under the London Building Act, held by the Institute pursuant to statute, took place on the 23rd and 24th October. Of the six candidates examined, four passed, and have been granted by the Council certificates of competency to act as District Surveyors in London. The successful candidates are:—

WILLIAM EDWARD BROOKS [*A.*], "Redcote," 40 Sydenham Road North, Croydon.
JOHN PERCIVAL EDWARDS, P.A.S.I. [*Licentiate*], "Glenvale," Cromwell Road, Beckenham, Kent.
FREDERIC SNOWDEN HAMMOND, P.S.I. [*Licentiate*], 23 Barbican, E.C.
HUBERT COVELL SANDS [*Licentiate*], "Amhurst," Giral Road, Lee, S.E.

The Board of Architectural Education.

The name of Sir Amherst Selby-Bigge was inserted in error in the announcement in the last number of the JOURNAL of newly appointed Advisory Members of the Board of Architectural Education.

Books Received.

Baroque Architecture. By Martin Shaw Briggs. 8o. Lond. 1913. Price 21s. net. [Fisher Unwin, 1 Adelphi Terrace.]
Practical Surveying and Elementary Geodesy. By Henry Adams, M.Inst.C.E. &c. 8o. Lond. 1913. Price 4s. 6d. [Macmillan & Co. Limited, St. Martin's Street.]

LEGAL.

Builder's Liability for Goods ordered by Architect: Decision of the Court of Appeal reversed.

RAMSDEN AND CARR v. J. CHESAM AND SONS.

This was an appeal to the House of Lords from a decision of the Court of Appeal reversing a decision of Mr. Justice Hamilton, reported in 29 *The Times* L.R., 55 (reprinted by permission in the JOURNAL R.L.B.A. 10th May 1913). The appeal was heard by the Lord Chancellor, Lord Kinnear, Lord Dunedin, and Lord Atkinson on 10th November. The following report is from *The Times* of the 11th:—

The respondents were builders who contracted to erect a picture theatre to be known as "Cinema House" in Oxford Street for the London Cinematograph Company (1909), Limited. The appellants carried on business in South Kensington as designers and makers of door handles and door furniture. In March 1910 Mr. Melville Seth Ward, who was the architect for the building owners, invited the appellants to quote for and supply door handles and door furniture, and gave them particulars of the articles required for the portion of Cinema House known as the theatre. The appellants gave quotations, which were accepted by Mr. Ward in April 1910. On the 12th July 1910 most of the goods so ordered were duly delivered at Cinema House, but

a few articles were delivered subsequently. The total cost of the goods was 142*l.* 13*s.* The respondents had been expressly informed by the architect that the door handles and other articles were being supplied by the appellants, and they used the goods for the theatre. The appellants brought an action against the respondents and Ward to recover the price of the goods. By their statement of claim they alleged that by a certificate in writing, dated 16th September 1910, the defendant Ward certified for 1,500*l.*, which it was alleged included the price of the goods supplied by the appellants, and that the architect had acted, in effect, as the agent of the respondents. They accordingly sued for 142*l.* 13*s.* as for the price of goods sold and delivered, or, in the alternative, as for money had and received to the respondents' use or held in trust for them. The respondents by their defence denied that it was their duty to supply the door handles as alleged, and they further denied that the defendant Ward was their agent.

Clause 20 of the building contract, which was in the form approved by the Royal Institute of British Architects, provided: "All specialists, merchants, tradesmen, or others executing any work or supplying any goods for which prime cost prices or provisional sums are included in the specification, who may at any time be nominated, selected, or approved by the architect, are hereby declared to be sub-contractors employed by the contractor, but no such sub-contractor shall be employed upon the works against whom the contractor shall make what the architect considers reasonable objection, or who will not enter into a contract with the contractor upon terms and conditions consistent with those in this contract, and securing the due performance and maintenance of the work supplied or executed by such sub-contractor, and indemnifying the contractor against any claims arising out of the misuse by the sub-contractor or his workmen of any scaffold erected or plant employed by the contractor, or that may be made against the contractor in consequence of any act, omission, or default of the sub-contractor, his servants, or agents."

The defendant Ward did not appear. Mr. Justice Hamilton held that the appellants had failed to show that the architect had acted as agent for the respondents; that the appellants had no claim as for money had and received; but that in the circumstances of the case the fact that the goods were used by the respondents raised an implied promise by them to pay for them, and he accordingly gave judgment for the appellants for the amount claimed. The Court of Appeal by a majority (the Master of the Rolls and Lord Justice Buckley, Lord Justice Kennedy dissenting) reversed the decision of Mr. Justice Hamilton, and held that the appellants were not entitled to recover.

Mr. Sankey, K.C., and Mr. Bromley Eames appeared for the appellants; and Mr. Radcliffe, K.C., and Mr. G. A. Scott for the respondents.

The Lord Chancellor said that this was an unfortunate litigation. The amount at stake was 142*l.*, and yet the case had had to come to this House. Two Judges had decided the case one way and two the other. Notwithstanding the able arguments advanced on behalf of the respondents, he was unable to come to any other conclusion than that Mr. Justice Hamilton was right. The case was a simple one; it was a case in which it was sought to recover the price of goods sold and delivered. The law as to this class of case was not obscure. If A. brought goods to B. to be used upon work which B. was doing, and B. knew that those goods were not brought as a gift, but were meant to be paid for, and B. then used the goods upon his work,

the inference to be drawn from those facts was that there was an implied promise on the part of B. to pay for the goods. That was exactly what happened in this case, and there was nothing in the facts of the case to displace the *prima facie* inference that B. was liable. Upon all the facts of the case his Lordship was of opinion that the view of Mr. Justice Hamilton and Lord Justice Kennedy was right. He therefore moved that the order of the Court of Appeal be reversed, and that the judgment of Mr. Justice Hamilton be restored.

Lord Dunedin agreed with the statement of the law laid down by the Lord Chancellor, but he ventured to make this addition—that when a tradesman supplied goods the person to whom the goods were proffered was understood to know that they were not intended as a gift, because gift-making tradesmen were not to be found in everyday life.

The other noble and learned Lords concurred.

MINUTES. II.

At the Second General Meeting of the Session 1913-14, held Monday, 17th November 1913, at 8 p.m.—Present: Mr. Alfred W. S. Cross, M.A. Cantab., *Vice-President*, in the Chair; 32 Fellows (including 10 members of the Council), 39 Associates (including 2 members of the Council), 15 Licentiates, and numerous visitors—the Minutes of the Meeting held 3rd November, having been published in the JOURNAL, were taken as read and signed as correct.

Mr. E. Gay Dawber, *Hon. Secretary*, announced the decease of Mr. John Belcher, R.A., *Fellow*, Past President and Royal Gold Medallist, and having referred to his eminent services to the Institute and to architecture, Professor Beresford Pite [F.] paid a tribute of respect and admiration to his high personal qualities and artistic genius, whereupon, on the motion of Mr. Dawber, seconded by Professor Pite, the Meeting

RESOLVED, That the Royal Institute of British Architects desires to express its high estimate of the valuable and productive labours of its late distinguished Fellow, Mr. John Belcher, R.A., in furtherance of the advancement of architecture, and of the eminent services he rendered the Institute as Member of Council and President; and that the Institute do record its sorrowful regret at his demise, and do offer to his widow and to his brother, Mr. A. H. Belcher [A.], an expression of sympathy and condolence with them in their bereavement.

The decease was also announced of Sir Alfred East, R.A., *Hon. Associate*, and a vote of condolence was passed to his nearest relatives.

The following further losses which the Institute had sustained by death since the last meeting in June were also announced, viz.: William Chasen Ralph, *Fellow*, elected 1903; John Dodsley Webster, *Fellow*, elected 1882; Ernest Augustus Runtz, *Fellow*, elected 1906; William Murray, *Associate*, elected 1881; Ernest Charles Henry Bird and William John Oliver, *Licentiates*; and Heino Schmieden, *Hon. Corresponding Member*, Berlin, elected 1903.

Mr. H. V. Lanchester [F.] having read a Paper on THE NEW WESLEYAN METHODIST BUILDING, WESTMINSTER, and illustrated it by lantern-slides, on the motion of Sir Aston Webb, R.A., seconded by Mr. George Corderoy, a vote of thanks was passed to him by acclamation.

Mr. Lanchester having responded, the proceedings closed, and the meeting separated at 9.45 p.m.



SAINT-ETIENNE, BEAUVAIS

Fullest development of organic Romanesque. The present vaulting is early Gothic.



ROMANESQUE SCULPTURE, WEST FRONT, LINCOLN CATHEDRAL.

ROMANESQUE ARCHITECTURE.

By PROFESSOR CHARLES H. MOORE, A.M. [*Hon.A.*].

THE term Romanesque, as applied to the church architecture of the eleventh and early twelfth centuries in Western Europe, is a good one in so far as it marks the correspondence of this art with the new idioms of speech that were then growing out of the fusion of races, and which are known as the Romance dialects. But used without discrimination the term is a vague one, since the architecture in question embraces a great variety of types, in some cases differing fundamentally one from another, and of very unequal importance from the point of view of subsequent architectural development.

Quicherat's* definition of Romanesque as that architecture of the Middle Ages which has ceased to be Roman, though it derives much from the Roman source, and is not yet Gothic, though it has some elements of Gothic,† though profoundly true of one variety of it, is not at all true of Romanesque in general. The French archæologists of the early part of the nineteenth century, who first used the term, took little account of the fundamental differences of types. The common feature of the round arch—which they regarded as distinguishing the Romanesque from the subsequent Gothic style—seemed to them to bring all of this architecture into one category, and such classification of schools as they attempted was based on a minute study and comparison of unessential details. Great misapprehensions thus arose, and a bewildering confusion of ideas has prevailed in consequence. Quicherat, however, writing in 1851, brought some order into this confusion by seeking the distinctive character of Romanesque, as differentiated from Roman, in structural analysis; and his classification of Romanesque types is based on such analysis.‡ He remarks on the futility of looking for the essential traits of Romanesque

* Jules Quicherat, *De l'Architecture Romane*, in the *Mélanges d'Archéologie et d'Histoire*, edited by M. de Lasteyrie, Paris: 1886, tome II. *Moyen Age*.

† *Ibid.* p. 88.

‡ It is worthy of notice that the English writer, Willis, preceded Quicherat in recognising the primary importance of construction in architectural studies. In the preface to his *Architecture of the Middle Ages* (London, 1835), p. 5, he

architecture in mere details, and says of the earlier archæologists: "Ils énumèrent les façons données aux pierres, mesurent leurs faces, dissertent sur les mortiers qui les relient; ils vous décrivent les moulures, les modillons, les feuillages appliqués sur les bandeaux des frises et aux chapiteaux des colonnes; poussent même la minutie dans cette dernière étude, jusqu'à en faire une botanique à eux qu'ils appellent la *Flore Murale*. Mais de tous ces traits si laborieusement recueillis ne résulte pas la physionomie du genre; car" * Then follow some remarks in which he maintains that these details differ from those of ancient Roman art only in being rude and imperfect, wherefore, he thinks, they cannot be called distinctively Romanesque. He overlooks here the marked Byzantine elements that are present, and the new spirit that is largely recreating the ancient motives. As to the fundamental characteristics of Romanesque, he strikes solid ground in saying that what chiefly constitutes this art "n'est qu'une manière d'être particulière de la construction et dont en définitive le caractère ne peut tenir qu'aux dispositions fondamentales des édifices, aux lois d'après lesquelles les pleins et les vides s'y montrent combinés; de même que les caractères distinctifs des espèces animales résident dans la structure des corps et non dans le tissu des organes." † But while he shows a keen appreciation of logical organic composition, he fails to emphasise the difference between buildings which show this and those that have little, or none at all, of this character. His analysis of structural forms is, for the most part, just, as far as it goes. He perceives that the forms and adjustments of supports in vaulted buildings have their rise in the exigencies of vaulting, but he fails to notice how rarely a logical system is fully carried out, and how numerous are the instances of organic misadjustment. He does not see that of the manifold types of Romanesque only that in which groined vaulting is associated with a growing organic relationship of structural parts, extending through the whole building, can be properly called transitional in the sense of his own definition of Romanesque as an art developing into Gothic. And when he says: "Le trait essentiel du genre roman . . . c'est la voûte," ‡ he overlooks the fact that a great deal of Romanesque architecture is unvaulted, and shows no consistent intention of vaulting. Thus, notwithstanding that he did much to put the study of this subject on a right basis, he did not fully clarify it. He gives a lucid analysis of different types of Romanesque, but by lumping them all together as transitional he leaves us in confusion.

Choisy, § like Quicherat, lumps Romanesque all together, and says of it: "presque toutes sont des églises monastiques. Œuvres de pure imitation, quelques-unes reproduisaient des plans byzantins; la plupart répondaient simplement au type de la basilique latine." || Then of the architecture of the Middle Ages in general he says: "Il a deux âges bien distincts: un âge de formation par voie d'emprunt, auquel on a très justement donné le nom même qui désigne les langues nouvelles dont il est contemporain, l'âge roman; puis l'âge d'originalité absolue, l'âge analytique au plus haut point, auquel on attribue le nom impropre mais consacré de gothique. De l'un à l'autre il n'existe point d'interruption: l'un marque l'aspiration méthodique, l'autre le résultat acquis." ¶

Thus the confusion becomes worse confounded. Where Quicherat finds Romanesque an art of transition, Choisy considers it an art of pure imitation, following, for the most part, the basilican model. But the writer is here strangely inconsistent. If the works of the two periods into which he divides the architecture of the Middle Ages are, as he tells us, wholly distinct, how can it be said that between them there is no break; and how can the one be an architecture of formation if the other is an art of absolute originality?

lays stress on what he calls "the distinction between the Decorative and Mechanical structures of buildings," and in all his works he concerns himself primarily with construction.

* *Architecture of the Middle Ages*, p. 89.

† *Ibid.* p. 90.

‡ *Ibid.* p. 101.

§ Auguste Choisy, *Histoire de l'Architecture*, Paris, 1899.

|| *Ibid.* tome II. p. 130.

¶ *Ibid.* p. 140.

Viollet-le-Duc, whose knowledge of construction and of structural evolution in architecture is unequalled by that of any other writer thus far, does not include the word *Romane* as the heading of an article in the *Dictionnaire*; but he uses it freely in many parts of the work. Like the foregoing writers he calls all mediæval architecture in the West Romanesque, except the Gothic. But in developing the evolution of the Gothic style he finds its elements in the groin vaulted variety only. Thus he does not, like Quicherat, make Romanesque in general a transitional art.

Let us seek a clearer understanding of Romanesque architecture, more particularly of that variety of it which was quick with the germs of Gothic development. It is important to bear in mind that the elements out of which this multiform art arose were derived from various sources where they had been shaped, respectively, under widely differing conditions. They were not, as Quicherat in his definition implies, merely Roman elements,* though the Christian Roman basilica naturally gave the model for the primitive churches in all parts of Europe. In church building, as in all else, Rome was conservative. Throughout the Middle Ages nothing happened there to greatly disturb the local building traditions. The city was never held for any length of time under barbarian rule,† and as the Roman Church held sway over Western Christendom, there naturally went forth continuously from Rome to the remotest provinces of the West, together with the authoritative ecclesiastical system, a practically uniform influence in church building. Thus the basilican idea was established and long remained dominant.

But that diversity should arise, even in basilican architecture, was inevitable under the conditions that prevailed. In Italy, where traditions were strong and ancient monuments from which members and materials could be had were abundant, the churches had a degree of elegance, and even of classic character, that could not be attained elsewhere. In the northern provinces, on the other hand, models and materials were lacking, and thus in those localities ruder forms of basilican structures arose. In considering the varieties of Romanesque architecture with a view to discover, in any given case, the extent to which the basilican idea prevails, it should be kept in mind that the constant characteristics of basilican building are timber roofs, save for the half-dome vault over the apse, supported on relatively thin walls and continuous arcades or colomades, without any buttressing features.

But in Rome, side by side with the basilicas, though much less frequently, and chiefly for baptisteries, buildings circular or polygonal on plan were erected. These are in some cases purely basilican in principle of construction, as the Baptistry of S. Giovanni Laterano, while others, as the round church or tomb of Sta. Constantia, are vaulted with a hemispherical dome over the central area, and an annular barrel-vault over the concentric aisle. These Roman forms, but chiefly that of rectangular plan, were primarily influential in the West wherever churches were built.

A secondary influence, however, came from Byzantium, and began to act on the architecture of the West during the Carolingian epoch. The beginnings of the noble Byzantine art, which assumed its distinctive character in the sixth century, are obscure. But it appears to have grown mainly out of a creative fusion of Roman and Eastern elements under the quickening power of the Byzantine Greek genius, which the stimulating conditions following the transference of the seat of empire seem to have awakened into renewed life.

The Byzantine structure differs greatly from the basilican in being vaulted throughout. This vaulting is of two principal forms—that of the hemispherical dome and that of the domical groined vault. The chief peculiarity of the Byzantine structural system consists in the adjustment of the circular dome to a square area by means of pendentives, or spherical triangles of

* It is fair to say that later on he recognises the Byzantine and other elements.

romaine." Guizot, *Hist. de la Civilisation en France*, edition of 1884, vol. ii. p. 307.

† "Seule, elle resta romaine après la ruine de l'Empire

masonry, one in each angle of the square, which give the circular bed on which the dome rests. Pendentives are found in a few instances in Roman buildings of polygonal plan, as in the so-called temple of Minerva Medica. But they never became characteristic of Roman building, and were never used in Rome with the hardihood displayed by the Byzantine constructors. In Byzantine architecture, as in no other, it became the most distinctive structural feature.

But while the dome on pendentives is the most essential feature of the Byzantine style, it is not the most important from the point of view of subsequent vault development in Western Europe. Placed over the crossing of nave and transept, it modified, indeed, very conspicuously many forms of Romanesque architecture of basilican plan in the eleventh and twelfth centuries; but its influence was not nearly so great and recreating as that of the domical groined vault. For the dome is incapable of development, since with any essential change of form—as that of breaking it up into cells—it ceases to be a dome.* But the domical groined vault contained seeds of far-reaching developments. In this vault the groin arch has a semi-circular or segmental curve, and lies in a vertical plane. The crown of this arch, since its span is longer than the spans of the arches on the sides, reaches a higher level, and thus makes the vault domical. The substitution of this form of groin for the elliptical groin of the Roman builders gave a freedom in vault construction before unknown. For whereas before the groined vault could not be shaped to an oblong area without tilting the narrow-spanned arches, and developing groins sinuous on plan, it could now be adjusted to a rectangle of any proportions with groins straight on plan and without tilting.

These two traditions, basilican Roman and Byzantine, governed, for the most part, all building in the West during the earlier Middle Ages. But in the north, from the ninth to the eleventh centuries, with the conditions that followed the rise of the new monarchies, and the growth of independent local activities under diverse racial conditions, new features in great variety arose in the architectures of different localities, so that in the eleventh century the varieties of structural forms became so great that the study of them is bewildering until we get some grasp of the broad principles which enable us to classify them, and thus to bring order into the apparent chaos.

With the placing of the dome on pendentives or on squinches, over the crossing of the basilica, the building was made to embody two wholly different older structural systems, neither of which was changed in any essential way, as in the cathedral of Pisa. But where the Germanic races had become dominant and a fusion with the Latin stock had made some progress, architecture began to assume a character essentially different from any that had before been known, and to exhibit in some localities a tendency to a novel sort of organic composition. Here cautious discrimination becomes necessary in order to find a working principle of classification that will enable us to disengage the true organic types from those that are essentially survivals of older forms or that suggest, by their functional inconsistencies, imperfect imitation of genuine organic systems. It appears to me that most of the architecture of the Middle Ages was more or less imitative rather than genuinely creative. There are two kinds of structural imperfection noticeable in many buildings having features that belong to the organic type. The first is that—natural to stages of experimentation—in which the organism is as yet incomplete, and the second is that which betrays unintelligent copying. The first does not violate reason, but the second is known by its manifold inconsistencies.

It is now commonly recognised that the new features that differentiate the architecture of the eleventh century from the purely basilican style, arose out of the exigencies of vaulting over naves. But it is not so clearly seen that the various forms of vaulting in use at that time

* Cf. my *Character of Renaissance Architecture*, pp. 56-59.

were not equally conducive to the growth of that peculiar structural system which characterises the really organic Romanesque art. The barrel vault, for instance, so extensively used in the churches of Southern Gaul, could hardly have given rise to the logically compound support that we find in these churches. For while the transverse ribs with which some of these vaults are furnished give a reason for separate supporting members, the ribs themselves arise from no structural necessity, as is shown by the numerous barrel-vaulted naves where, as in the church of Notre Dame du Port, Clermont, no ribs occur. A barrel vault is a continuous arch, and is secure at every point in its length if it be properly abutted. Therefore a transverse rib has no such function in a barrel vault as it has between adjoining compartments of groined vaulting. Neither the ribs, their supports, nor the isolated buttresses are necessary in barrel-vaulted structures. The buttressing of such vaults, to be logical and effective, ought to be continuous, since the thrusts are equal at all points. Thus Viollet-le-Duc remarks: "La poussée continue de ce genre de voûtes les fit bientôt abandonner." *

The use of barrel vaults over naves was natural with the builders of Southern Gaul, where the ancient Roman civilisation had long flourished, where barrel-vaulted Roman structures had survived, and where Roman institutions and ideas had been largely maintained. † Thus when the great mediæval revival of building set in it was not unnatural that the ancient models should here have been followed. And since in some of the local ancient vaults salient transverse ribs were found, as in the aisle of the amphitheatre at Nîmes, it was equally natural that these too should be copied. But for the compound supports, above mentioned, the ancient monuments furnished no models, and it appears to me probable that they were derived from the Lombard side of the Alps, where such supports were taking form as early as the tenth century. ‡

It is not, then, to these barrel-vaulted structures, based as they are on an ancient system that contained no seeds of growth—for of all forms of vaulting the barrel vault lends itself least to organic development—that we should look for the beginnings of the progressive building of the Middle Ages. An architecture so different as this progressive style is from any that the genius of the ancients had produced would not be likely to arise where the ancient ideas had remained so dominant as they had in Southern Gaul. But new developments would appear natural where the fresh spirit of the Northern genius had become active. It is accordingly in North Italy and in Northern Gaul that we find the earliest instances of structural innovation, and a comparative study of the monuments of these two regions appears to me to point to North Italy as the seat of the first inventive developments.

Although no architecture of a new character, dating from the time of the Lombard occupation, could be looked for in the nature of things—since it would necessarily take time for the barbarian spirit to make itself felt in works of art—there is every evidence that the native genius of this region was profoundly modified by the Lombard sojourn, so that the genius of the mixed race, after it had had time to mature, would find expression in new modes of design. And when we consider that the so-called Lombard Romanesque architecture, as we find it in the vaulted nave of St. Ambrogio of Milan, has a character radically different from the native Italian basilican style and from any other previous style, it would seem clear that it must have been due to a creative impulse imparted by the Northern people. It is, however, maintained by some recent writers that the ribbed groined vault, § the generating feature of St. Ambrogio, was not of Lombard origin. The latest advocate of this view is the distinguished French archæologist, M. le Comte de Lasteyrie, who in his copious and valuable work, *L'Architecture Religieuse*

* Dictionnaire, &c., s.v. Voûte, p. 500.

† "La Gaule était située sur la limite du monde romain et du monde germanique. Le Midi de la Gaule a été essentiellement romain, le nord essentiellement germanique." Guizot, *Hist. de la Civilisation en France*, tome I. p. 36.

‡ Cf. Cattaneo, *L' Architettura in Italia dal Secolo VI al Mille Circa*, Venice, 1889, p. 228 et seq.

§ This is a long name for a vault, but nothing shorter will express with precision what is meant.

en France à l'Epoque Romane,* affirms emphatically that the use of the groin rib was a spontaneous French invention, basing the affirmation on what he believes to be the dates, respectively, of the earliest Lombard and the French vaults with groin ribs. It will be worth while briefly to consider his argument. After discussing the view of Quicherat, who derived the groin ribs from a Roman source, and concluding that he was mistaken, he remarks: "Il est donc infiniment plus vraisemblable que l'idée de la croisée d'ogives leur est venue spontanément comme une conséquence naturelle des principes qu'ils [the French] appliquaient dans leurs constructions. L'ogive est, en effet, à la voûte d'arêtes, ce que le doubleau est à la voûte en berceau; il est tout simple que des architectes, frappés du secours qu'ils trouvaient dans les doubleaux, aient cherché dans les ogives un secours analogue pour la construction des voûtes d'arêtes. Je n'hésite donc pas à considérer la croisée d'ogives comme une invention spontanée des architectes français de la fin du XI^e siècle. Je dis français, car, s'il a pu y avoir jadis quelque doute à cet égard, on ne conteste plus guère aujourd'hui à notre pays la paternité de cette invention. L'Italie y a prétendu pendant longtemps, et il s'est trouvé, même en France, des auteurs pour attribuer aux croisées d'ogives que l'on voit à Saint-Ambroise de Milan, à Saint-Michel de Pavie et dans quelques autres édifices de la Lombardie, une antériorité marquée sur les plus vieilles ogives de France."† In reply to this it may be said (1) that what is thought to be *plus vraisemblable* does not, of course, justify an unqualified affirmation, and that the argument by which the author seeks to fortify his opinion is unsound, for (2) it is incorrect to say that the groin rib is to the groined vault what the transverse rib is to the barrel vault. The function of the groin rib is to strengthen a part of the groined vault that is weaker than the rest, but in the barrel vault no part is weaker than another; and although it may be possible that the use of the transverse rib in the barrel vault might suggest the use of the groin rib in the groined vault, I do not think it would be likely to do so. (3) The question of priority as between the Lombard use of the groin rib and that of the French builders is hardly disposed of by the author's remarks here, nor by his further argument as follows: "Mais ce sont des idées qu'il n'est plus possible de soutenir aujourd'hui, car il n'est pas douteux que Saint-Michel de Pavie n'ait été rebâti de fond en comble à la suite du terrible tremblement de terre qui détruisit la ville en 1127." For confirmation of this he cites Cattaneo, but all that this writer says in the passage referred to is that in his belief San Michele "sorgesse appunto nel principio del Secolo XII, e forse dopo il famoso terremoto del 1127."‡ This is hardly a demonstration, and to say that the rebuilding was *perhaps* after the earthquake does not justify M. de Lasteyrie's emphatic affirmation that it was. It may, however, very well be true that what remains of the Lombard nave of this church is a work of the early years of the twelfth century. M. de Lasteyrie continues: "Quant à Saint-Ambroise de Milan, ses voûtes sont loin d'avoir l'antiquité qu'on leur a prêtée. Cattaneo a montré avec une grande force de raisonnement que la seule partie de l'église remontant aux temps carolingiens était l'extrémité orientale de l'édifice. . . . Il admettait que la nef avait pu recevoir sa forme actuelle avant le dernier quart du XI^e siècle, mais ses voûtes, si elles existaient dès cette époque, avaient dû être refaites depuis, car elles étaient assez mal construites pour qu'une partie d'entre elles se soient écroulées dans les dernières années du XII^e siècle." The remark about the east end is irrelevant, since that part of the building is not in question, and it is well known that it is a part of an earlier edifice, built in the ninth century under the pontificate of Archbishop Angilberto. The part with which we are concerned is the groin-vaulted nave, and if this part had its present form, as Cattaneo supposes, before the last quarter of the eleventh century—however much the vaulting may have been damaged and repaired later—then the priority of the Lombard use of the groin rib, and the complete organic system with which it is

* Paris, Alphonse Picard et Fils, 1912.

† *Op. cit.* p. 259.

‡ *Cf. Cattaneo, op. cit.* p. 211 (footnote).

connected, would seem to be established, for nobody supposes that there was anything of the kind elsewhere in Europe at that time.

M. de Lasteyrie appears illogical in his further argument also. After referring to certain documents lately brought to notice by Sig. Biscaro, he says: "M. Biscaro a conclu de ces documents que la reconstruction de Saint-Ambroise avait eu lieu de 1098 à 1145 environ," and on the strength of this he affirms that the vaults of the nave "ne sont pas antérieures de beaucoup au milieu du XII^e siècle et à la construction des voûtes de Saint-Denys." This is not a fair deduction from the passage quoted, for if the work was begun, as Sig. Biscaro holds, in 1098, then it is, in idea at least, a work of the eleventh century, and a great part, if not all, of it would naturally have been built in the early years of the twelfth century. But however this may be, to take the date of completion of a work begun half a century before, and maintain that the system embodied in it had not arisen before that date, is to disregard reason.

With reference to St. Denis M. de Lasteyrie remarks that its vaults "ne sont sûrement pas le coup d'essai des architectes français. Elles sont aussi habilement combinées que celles de Saint-Ambroise le sont peu, et l'on ne saurait douter que le pays qui les vit élever de 1140 à 1144, n'ait été le théâtre de bien des essais et de tâtonnements avant d'arriver à un pareil résultat." But this reasoning applies equally to St. Ambrogio. There can be no doubt that there were many earlier experiments in organic vaulted building in Lombardy, and remains embodying some of these are extant.

In a footnote M. de Lasteyrie remarks that Sig. Rivoira* has lately admitted the reconstruction of St. Ambrogio in the twelfth century. But reconstruction does not affect the question so long as the first building is admitted to have been begun in the same form. If the work was begun on these lines in 1098 it is clearly, as I have said, an eleventh-century idea; for in such a system the whole is necessarily foreseen and provided for from the beginning. From the moment when the piers were set out there could, from their forms, be no question that the entire organism, as we behold it, was intended. In his zeal to establish a French origin for the groin rib M. de Lasteyrie has made affirmations which the facts, so far as they are known, and even as he states them, do not warrant.

Bearing in mind that it is not the groin rib alone that should concern us but the whole system to which ribbed groin vaulting logically gives rise, let us now consider the system of St. Ambrogio, † and compare it with such other early systems as we may find.

The first striking feature of the vaulting of St. Ambrogio is a system of salient ribs, including groin ribs. All of these ribs are semi-circular, or nearly so, and since the diagonals have longer spans than the ribs on the sides of the compartments, they reach a higher level, and thus give the vault a domical form, like that of the Byzantine vault already considered. These ribs form a strong skeleton on which the vaults are turned, and constitute the first step in the transformation of the Byzantine vault into the Gothic vault.‡ For this rib skeleton the piers make perfect provision, the transverse rib having for its support a pilaster strip rising from the pavement, the groin ribs having each an engaged column, and the longitudinal rib springing from a rectangular member rising from the ground story impost. The aisles, being about half the width of the nave, are in each bay divided into two parts by a smaller pier and a transverse arch, so that there are two compartments of aisle vaulting to one compartment in the nave. Thus is developed an alternate system of piers which, with many variations of proportions and details, are often met with in the subsequent Romanesque buildings of many parts of Europe. The

* *Le Origini della Architettura Lombarda, &c.*, Rome, 1907, p. 260.

† I have twice before had occasion to describe St. Ambrogio, first in my *Development and Character of Gothic Architecture*, second edition, p. 36 et seq., and again in my

Medieval Church Architecture of England, p. 26 et seq.

‡ I do not affirm that this first step was first taken here, nor even that it was first taken in Lombardy, though such evidence as we have appears to me to point to this conclusion.

smaller pier of St. Ambrogio, having no part in the support of the high vaulting, does not rise above the ground story impost, but is logically composed in conformity with the arches that spring from it, namely, the great double archivolts and the transverse rib of the aisle vaulting. Since the aisle vaults have no groin ribs, no secondary members occur on the aisle side; there is, however, a small colonnette rising from the capital of this lesser pier to the level of the triforium string, which has nothing to carry, and no apparent reason for being. St. Ambrogio has no clerestory, but what I have just called a triforium is a vaulted gallery, and the double archivolts of this gallery are carried on short compound supports corresponding to those below. Externally the system is reinforced by plain rectangular buttresses set against cross walls over the gallery. It is worthy of notice, too, that the logic of the system is carried out in the bases and capitals—those that carry the groin ribs being set obliquely in conformity with the directions of those ribs.

I know of no equally logical organic vaulted system north of the Alps until we come to the church of St. Etienne of Beauvais, which can hardly have been begun before the end of the first decade of the twelfth century,* to which time the easternmost bay may, I think, be pretty safely assigned. This easternmost bay shows the original system intact,† except the high vaulting, which was rebuilt after a fire that damaged the building in the year 1180. The system is not so complete as that of St. Ambrogio, since there is no member in the pier for the support of a longitudinal rib. The longitudinal rib is, in fact, frequently wanting in the early twelfth century vaulting of the Ile de France. But apart from this St. Etienne is remarkable for logical organic composition, having independent supports from the pavement for the transverse ribs and groin ribs, and the bases and capitals of these last set obliquely as in St. Ambrogio. The composition as a whole is very plain, and although it has a clerestory, there are, in this earliest bay, no triforium openings. The system of St. Etienne is uniform, and differs greatly from St. Ambrogio in its proportions, as well as in the style of its details; but in structural principle the two are alike, though St. Etienne is in advance of St. Ambrogio in having the domical ribbed groined vault applied to oblong areas, and in having groin ribs in the aisle vaults as well as in those of the nave. St. Ambrogio of Milan and St. Etienne of Beauvais are, I believe, the only Romanesque buildings dating from before the second half of the twelfth century, now extant in Europe, that show, substantially intact, a logical organic system for vaulting with groin ribs. In the nave of Vézelay we find, indeed, a logical scheme, but its vaulting is not furnished with groin ribs, and the pier is correspondingly imperfect in development. In the Ile de France, from the first quarter of the twelfth century, the air was quick with the spirit of invention, so that buildings like St. Germer de Fly, although classed by Quicherat and de Lasteyrie as Romanesque, are really advanced transitional Gothic, notwithstanding the survival in them of some very primitive Romanesque features.

No French province in the eleventh and early twelfth centuries showed more vigorous building activity than that of Normandy, and most of the churches here have many features that belong to an organic system; but I do not know of one dating from before the latter part of the twelfth century that is logically composed for high vaulting on groin ribs. There was no vaulting of naves in the early churches of this province, but in a few cases, as in the Abbaye-aux-Dames of Caen, plain groined vaults were built over short choirs—where the arms of the transept and flanking turrets gave strong abutment—soon after the middle of the eleventh century. There are two compartments of such vaulting in the Abbaye-aux-Dames.‡ Yet

* The nave of St. Etienne is commonly held to date from about 1130, but the easternmost bay appears considerably older, and it is to this part that I refer.

† The system of the nave of St. Etienne, including this earliest bay, is figured in my *Development and Character of*

Gothic Architecture, second edition, p. 105.

‡ They are shaped essentially on the Roman model, and are separated by a heavy transverse rib of one order, carried on a half-round shaft engaged with a pilaster.

few large churches in Normandy are without vaulting shafts incorporated with their piers. These shafts are, however, in most cases, carried up to the top of the wall, where vaulting could not spring.* Apart from vaulting such members have no functional propriety. They may, indeed, be made to carry the trusses of a timber roof, but such a roof does not require them, as is shown by all basilican structures. In these Norman works they are illogical.

It is worthy of notice that we find in the Norman Romanesque many instances of that alternate system that we have found in St. Ambrogio of Milan and some other Lombard churches. What remains of the great abbey church of Jumièges, dating from the middle of the eleventh century, and thus much earlier than St. Ambrogio, exhibits this system. To those who believe that the Norman art was in advance of that of Lombardy this may appear a demonstration of truth in their position. I do not, however, think that it is, though I am unable to point to any buildings with these alternate supports of so early date in Lombardy. For in the unvaulted Norman work such a system has no reason for being, and it would therefore hardly seem likely to be original. In vaulted architecture such an arrangement of supports grows out of the exigencies of vaulting where a great vault in the nave embraces two smaller vaults in the aisles as we have seen in the case of St. Ambrogio. There is obviously no occasion for it where there is no nave vaulting, unless it be supposed that the great shafts with which the larger piers are furnished carried cross-walls on transverse arches dividing the timber roof into compartments. This may very well have been the case,† and it would account for the buttresses that we find against the clerestory wall. It would, too, make the system logical, but it would take it out of the category of buildings advancing along the lines of vault development and what grows out of it in organic construction. However this may be, that the alternate systems of Jumièges and other Norman monuments were due to an influence transmitted from the Lombard source—where like systems were developed with such admirable logic in vaulted structures—appears to me the only reasonable inference from the monuments themselves. For in the Romanesque of Lombardy we have an art advancing on organic lines, while in Normandy there is little evidence of consistent organic development. Nor is the fact, if it be a fact, that no extant Lombard buildings embodying such a system are of so early date as the earlier Norman examples, any conclusive evidence of Norman priority. For it stands to reason that such a scheme as that of St. Ambrogio could not have been, to use M. de Lasteyrie's phrase in regard to St. Denis, a *coup d'essai*. There must, as I have said, have been earlier trials along the same lines.

The supposition that the Lombard structures were derived from Normandy appears to me to violate reason since, as I have elsewhere said,‡ it assumes that a logical system could be derived from an illogical one, and ignores the known influences that would naturally work in an opposite direction. The settlement in Normandy in the eleventh century of such native Lombards as Lanfranc and Anselm at the head, successively, of a great monastic house, habituated as we know such men were to active participation in the planning and erection of buildings, could hardly fail to have strong influence on the forming local art. Lanfranc had come to the Abbey of Bec in the year 1042, and thus before the church of Jumièges was begun, which seems to me, in itself, almost a demonstration that the alternate system of this church—the first, I

* Cf. my *Medieval Church Architecture of England*, pp. 2-4.

† The walls are still standing, and there are scars on them, over the shafts, which may either be from such cross walls, or from the shafts themselves if they were formerly carried up to the top of the wall in the common Norman manner. The shafts now reach no higher than the sills of the clerestory openings, a level from which either arches or vaulting might spring; but they could not have carried vaults in square compartments—which the system would call for—since the large clerestory openings are so placed

that vaulting arches would have crossed them. But there are indications of possible later vaulting in a different form. The capitals which still crown these shafts on the north side are of Gothic character, and between them, at the same level, the wall is broken in the middle of each double bay in a way that suggests the possibility that corbels were once inserted from which, together with the shafts, vaulting in narrow oblong compartments may have sprung. Such vaulting, if much stilted, might clear the clerestory lights. But no remains of vaulting appear.

‡ *Ibid.* p. 26 (footnote).

believe, in Normandy to have such a system—was derived from the Lombard source. Rude and uninstructed as the primitive Norman builders must necessarily have been, it stands to reason that they would be open to such architectural ideas as they could grasp from a source where the practice of architecture had long been going on under conditions far more favourable to inventive progress than any that could then have prevailed in Normandy. In borrowing features from the Lombard art it would seem natural that the inexperienced Normans would largely fail to comprehend their consistent use in that organic structural composition which had been in course of development in Lombardy since the tenth century. They did not see that in their unvaulted naves they had no proper use for these features, and in introducing them they committed, as we have seen, many structural solecisms.

In the foregoing remarks I have confined myself in each building considered to the main system almost exclusively, because here the fundamental characteristics and essential differences of styles appear, and because the analysis and comparative study of structural forms have been too much neglected in discussions on mediæval architecture. I have said little about general planning, and such features as towers, artistic proportions and groupings of parts, or of ornamental details, not only because the essentials of architectural styles do not primarily reside in them, but also because these things are already largely set forth in many books.

The study of mediæval architecture from æsthetic feeling, without proper reference to the structural basis of the art, is now giving place to a more fruitful study based on examination of structural forms. Writers are at present much occupied with ribbed vaulting, and many hitherto little-noticed examples of such vaulting are being brought to light. This is well, but as yet too little discrimination is shown in the discussions of them. The term *croisée d'ogives* appears with almost tiresome frequency in many contemporaneous French writings, but few writers have enough considered how little significance the mere presence of the groin rib may have from the point of view of an advancing art. The degree of importance attaching to it depends on the manner in which it is used. In the crypt of Gloucester Cathedral, for instance, are Norman vaults to which groin ribs appear to have been added at a time subsequent to that of the original construction. The ribs in this case have no significance in connection with vault development, since they do not shape the vault but are shaped by it. Again, in the aisles of Peterborough are vaults with groin ribs which are parts of the first construction, but they are without importance in the development of vaulting, since they are used imitatively and awkwardly, while the conformation of the vault retains as much as possible of the form of primitive groined vaulting. It is only when groin ribs are so shaped and adjusted as to determine, together with the other ribs, the form of the vault, and are supplemented by corresponding supports, that they have important significance. It is the tendency to a complete organic system, of which the ribbed groined vault is the generating feature, that marks the progressive type of Romanesque building. This type is developed, I believe, in the Lombard Romanesque and the organic Romanesque* of the Ile de France only. There are many buildings of the eleventh and twelfth centuries in different parts of Europe in which the organic idea, while it shapes some of the parts, is but partly or imperfectly developed. The Rhenish Romanesque churches furnish notable instances of this. In the cathedral of Speyer, for instance, the groin rib itself is wanting, and although the longitudinal rib is present, it is provided with no supporting member in the pier. Such buildings, wherever they are found, appear to me to show imitation without proper grasp of the organic principle.

A discriminating examination of what is commonly known as the Romanesque architecture of the Middle Ages shows, then, that (apart from the barrel-vaulted structures of Southern

* There was much basilican Romanesque, and other backward Romanesque, in the Ile de France, as well as in other regions; and little of the strictly organic type survived the vigorous early Gothic movement.

Gaul, and the dome-vaulted buildings on the Byzantine model of the Périgord) the many forms of it are broadly reducible to the two types of unvaulted basilican and vaulted organic structures, or structures having some organic features. But it shows also that few of them are either purely basilican or consistently organic. The basilican structure is in many cases, as we have seen, modified by some form of vault or tower over the crossing, giving rise to massive supporting piers of variously compound form (and sometimes to an almost entirely vaulted east end) by altered proportions, by structural details that have lost all Roman character, and by ornamentation almost equally removed from that of Roman art though based on Roman motives. Take, for example, the nave of Vignory (Haute-Marne), a distinctly basilican structure dating from early in the eleventh century. But in the general character and expression of its proportions and details it differs greatly from a Roman basilican church. In this northern province there were no remains of older buildings from which capitals, columns, and other members could, as in Italy, be gathered. The rude workmen were obliged to construct piers of rough masonry for the ground story supports, though in the openings of the simulated triforium (there is no gallery over the aisle, but the aisle roof is as high as that of such a gallery would be) twin arches are supported in the middle on short colonnettes which so differ one from another in their proportions, some of them, too, having entasis, as to indicate that they are fragments from distant older buildings. The capitals of these colonnettes, of great variety and of rudely Byzantine character, were probably also brought from a distance. These features, together with the massive construction and taller proportions, give the interior an aspect very unlike that of a Roman basilican church; while the east end, save for the spherical half-dome vault of the apse, has no basilican character whatever. The crossing arch, of two heavy orders, is carried on compound piers, and a barrel-vaulted apsidal aisle has three small half-dome vaulted apses opening out of it. Thus, with endless variety, were basilican churches north of the Alps more or less changed in character and aspect.

Of the organic type, as we have seen, few are completely so, and the larger number can be included in the organic category only because features of an organic system are more or less freely used in them, and no parts retain the purely basilican structural forms. In such buildings vaulting members are either not used at all for vaulting or they are used without structural propriety.

In ornamental details, as wall arcades, the archivolts and jambs of portals and window openings, profilings, foliation and fretwork, all kinds of Romanesque are for the most part much the same. Of the many varieties of such details almost any may be found in any class of Romanesque buildings, and thus it is that so long as the study of mediæval architecture continued to concern itself mainly with these details there could be little understanding of the essential differences of styles.

The varieties of Romanesque, distinguished by their structural forms, may be broadly grouped under the five following heads: (1) The Basilican Romanesque; (2) The Organic Vaulted Romanesque; (3) The Imperfectly Organic Romanesque; (4) The Barrel-Vaulted Romanesque; (5) The Dome-Vaulted Romanesque.

Most of these groups might, however, be almost indefinitely subdivided. The Basilican Romanesque, for instance, assumes many different forms, especially in the parts that are vaulted. The Organic Romanesque divides broadly into uniform and alternate systems. The Imperfectly Organic Romanesque has vaulted and unvaulted types. The Barrel-Vaulted Romanesque presents a great variety of forms. It comprises buildings with high aisle vaults, giving abutment to the central vault, but making a dark nave; and those with low aisles, giving a clerestory. This last, however, is vicious in principle since it leaves the high vault without abutment. The barrel-vaulted structures further subdivide into those in which the vault is of round section,

and those in the form of the pointed arch ; and again into vaults having salient ribs, and those without such ribs. And still further we find barrel-vaulted naves with groin-vaulted aisles, as in Notre Dame la Grande, Poitiers. The dome-vaulted Romanesque is almost equally various, including domes of spherical form and those of ovoid, or of pointed outline. The forms of pendentive arches divide also into those which are semi-circular and those which are pointed. In another division we get domes with which the pendentives are continuous, as at Fontevault ; in still others the same form of vault has ribs on its surface, including diagonal ribs like the groin ribs of groined vaulting, as at Saumur. There are also some buildings of a logical, though not progressive, organic character, in which ribbed vaults are made so domical that groins are but slightly developed in them, as at Angers.

The basilican, the barrel-vaulted, and the dome-vaulted varieties, though often magnificent, are essentially survivals of older systems which have reached their full development. The organic type alone, I repeat, is the distinctive and transitional Romanesque of the Middle Ages which culminated in the Gothic style of the Ile de France.



Jumièges.

THE LATE JOHN BELCHER, R.A.

A Biographical Notice. By James W. James [A.].

THIS distinguished architect was born on the 10th July 1841, at Trinity Square, Southwark. He died, after a few days' illness, at his residence, "Redholm," Champion Hill, on the 8th November 1913, and was buried at Norwood Cemetery.

His father, Mr. John Belcher, was an architect and surveyor who carried on practice at 5 Adelaide Place, London Bridge, and served on the Council of the Institute and on the Board of Examiners for District Surveyors. He had artistic and musical gifts which his son inherited, and was also an able man of business, but his son's strength lay in other directions, although his quiet persistence usually gained the object he had in view.

John Belcher senior was twice married. His first wife, by whom he had ten children, the subject of this notice being the eldest, was the third daughter of George Woollett, of Chigwell, who was related to the eminent engraver, William Woollett, whose "works rank among the great productions of the English School of engraving" [*Encyc. Brit.* vol. xxiv. p. 663]. The latter was born in 1735 at Maidstone, of a family which originally came from Holland. He was appointed engraver-in-ordinary to George III., and died in 1785, being buried in the churchyard of St. Pancras, Middlesex. A memorial tablet was erected to his memory in the west cloister of Westminster Abbey. Probably our late colleague derived his many-sided artistic character from his Woollett ancestry, as other members of that family had similar gifts.

John Belcher was educated at private schools, and spent a year or two at school in Luxemburg. He was fond of sketching, and two views which he made at this time of the fortifications of Luxemburg were engraved in the *Illustrated London News* in 1867, when in consequence of the Franco-German dispute sketching was prohibited. He received his professional education at his father's office, but was placed for a time in the office of another architect in order to gain experience.

About 1862-3, at his father's wish, he spent some time in Paris studying and sketching modern French architecture. The fruit of this was seen when he assisted his father in the design for the Royal Insurance offices in Lombard Street, which have since been pulled down. The design for this building may be regarded, at least so far as the detail and external adornment were concerned, as the first design of John Belcher junior which was executed. The style was French Renaissance, and a good deal of sculpture was introduced, two figures over the doorway being the work of Thomas, the father of Hamo Thornycroft, R.A. The work is evidence that Mr. Belcher from the very beginning of his career considered that architecture should embrace in its scope the arts of sculpture and painting. His

later works prove that he consistently acted on this conception, and on receiving the Gold Medal in 1907 he acknowledged the assistance he had received from many great sculptors, who at one time or another had aided him in giving expression and artistic embellishment to his buildings.

After the erection of the Royal Insurance Buildings, Mr. Belcher had much to do with the design for the Commercial Union Assurance Company's offices in Cornhill, and other buildings in the City for which his father was architect, but with the other part of his father's practice—that of a surveyor—he had little sympathy.

On the 8th June 1865, Mr. Belcher married Florence, eldest daughter of Matthew Parker, of Dublin, a highly cultured lady and a charming conversationalist, to whom may be attributed much of his success in the exercise of his profession. It is well known that architects have dark days, and perhaps more personal disappointments than other professional men, but Mrs. Belcher's lively disposition and diverting Irish humour cheered and encouraged him.

When invited in 1899 to go to California as Norman Shaw's representative to adjudicate on the designs for the Phœbe Hearst University, he intended to decline, but on mentioning it to his wife, she remarked: "Nothing of the sort, of course you will go, and I will go with you." So they went, and had a most enjoyable time. The diary Mrs. Belcher kept, illustrated with sketches by her husband, and filled with photographs and newspaper cuttings regarding the country and the great competition, forms a most interesting and entertaining record of their visit.

At the time of his marriage Mr. Belcher was taken into partnership by his father. His chief work at this stage of his career was the building at the east corner of Poultry and Queen Victoria Street for Mr. Jas. Wheeler, now occupied by Mappin & Webb, Ltd., for whom the ground floor and basement were reconstructed in 1909. Mr. Belcher at this period was under the influence of the Gothic movement, and followed the example of Godwin, Street, and Burges. In 1875 a building he designed in the "Queen Anne" manner for the west corner of Poultry and Bucklersbury showed a marked change in his style. In 1871 he designed a small Hall in the Tudor style for the Worshipful Company of Curriers, which was shortly afterwards pulled down for the erection of warehouses for Rylands & Son, Ltd. In 1874 the present Hall for the Curriers' Company in London Wall, in fifteenth-century French Gothic, was erected, with the warehouses adjoining. Later on, other warehouses were erected for Messrs. Rylands in Philip Lane and Wood Street. Owing to exceptional circumstances the Wood Street building had to be framed with iron columns and stanchions and rolled iron joists, and roofed in, so that the work could go on without cessation, thus anticipating the later

steel-framed buildings. In 1882 these warehouses were destroyed, or very much injured, by the great Wood Street fire, and were rebuilt by Mr. Belcher.

About 1875 John Belcher senior practically retired from business, and his son entered into a partnership arrangement with the writer of this notice, who had been in his father's office since 1860. This arrangement lasted until 1882. In 1885 he made a similar arrangement with Mr., now Professor, Beresford Pite, which continued until 1897.



THE LATE JOHN BELCHER, R.A.

From the Portrait painted for the Institute by Mr. Frank Dicksee, R.A.

From 1881 to 1897 Mr. Belcher designed some charmingly thought-out domestic work, original, but evincing his admiration for and sympathy with Mr. Norman Shaw's methods. Among these works may be mentioned Eyot House, in Chiswick Mall, for Sir John Thornycroft, and a studio for Mr. Hamo Thornycroft; studio, &c., for Mr. Alfred Sassoon; Holcombe Wood, near Chatham; Morden Grange, Blackheath; Yeldhall Manor, near Twyford, originally named Bearroc; Mark Ash, Surrey; The Towers, Pangbourne, for Mr. Donaldson, and his own house, Redholm, Champion Hill; also the restoration with additions on a large and important

scale at Stowell Park, Northleach, for the Earl of Eldon. "The gardens of Stowell Park, and many of his houses, have been specially designed by Mr. Belcher. This is a matter which he felt to be of great importance, as it enabled him to link the buildings with the site, throwing out tendrils in the shape of terraces, walls, and hedges to tie it to the ground" [*Architectural Review*, Oct. 1908]. Most notable of all his works, perhaps, was the competition design, carried out without alteration,

for the Institute of Chartered Accountants, Moorgate Place, a building which, on account of its originality, has attracted a great deal of attention, and has had a marked influence in the progress of the "free Classic" style in English architecture.

The most prolific period in Mr. Belcher's practice was from 1897 to the present time. The list of works executed from his designs extends to such a length that it is difficult to make a selection without carrying this notice to an undue length, but the most important buildings were: the Town Hall, Colchester (1898); Electra House, Finsbury Pavement (1900); Cornbury Park, Oxon. (1901); premises for the *Birmingham Post*, Fleet Street (1902), and the Royal London Friendly Society, Finsbury Square (1905); Memorial, Lancaster Park, for Lord Ashton (1906); premises in Oxford Street for Mappin & Webb, Ltd. (1907); Royal Insurance Buildings, St. James's Street, Zoological Society's Buildings, Regent's Park, and Holy Trinity Church, Kingsway (1909); Messrs. Whiteley's new premises, Baywater, and the building for the Royal Society of Medicine (1910).

In 1905 Mr. Belcher took into partnership Mr. John James Joass, who had been in his office for about eight years previously. The partnership was in existence at the time of his lamented death, and the practice will be continued by Mr. Joass.

In 1890 Mr. Belcher had removed his offices from 5 Adelaide Place, London Bridge, to 20 Hanover Square, and in 1911 from Hanover Square to 9 Clifford Street, Bond Street.

The only churches Mr. Belcher built were the Catholic Apostolic Church, Camberwell New Road (1875), and Holy Trinity Church, Kingsway (1909), the one Gothic and the other Classic. He also restored Kington Church, Warwickshire, and South Marston Church, Wiltshire, where are painted panels in the reredos by his then assistant, Mr. Harry Wilson. He prepared designs for a top-lighted church at Westminster, for a large

church at Paddington, and for the completion of Raphael Brandon's great church in Gordon Square; but, with the exception of the carving in the nave of the latter church, none of these designs were carried out.

Mr. Belcher was also interested in literary work. Besides Papers read at the Institute, *e.g.* that on Musical Arrangements in Churches (17th December 1888), which led to a Committee being appointed, and a Report (published in 1892) on the Position of Organs in Churches, he wrote on public questions in which architecture was concerned, and in collaboration with Mr. Mervyn Macartney he published a most exhaustive work on the Late English Renaissance. Later he published a book on the "Essentials in Architecture," chiefly addressed to the general public.

As a musician he displayed considerable gifts as singer, composer, and conductor. His first published book, which appeared in 1872, was a short "History of Ecclesiastical Music." He frequently sang for charity or private concerts, and on one of these occasions he made the acquaintance of the late Professor John Ella, and joined a Musical Society which met at Mr. Ella's house in Victoria Square, S.W. From this time, about 1870, until Mr. Ella's death in 1888, he enjoyed the privilege of meeting most of the great musicians of that period, personal friends of Mr. Ella, who were engaged to play at the "Musical Union" Concerts in St. James's Hall. He was also a very intimate friend of the late Dr. Turpin, of the College of Organists, and sang in public for him on several occasions, taking the bass solos in "Elijah," "St. Paul," &c., the most notable performance being that of Dr. Turpin's "Song of Faith" in 1867, the soloists being amateurs, and the instrumentalists selected from the best orchestras in London. It is related of him that once, after he had been singing, he overheard two gentlemen talking together: "Who was that fellow who sang just now, that professional I mean?" said one. "Oh," replied the other, "that was John Belcher, an architect." "Well," said the first, "he can't be much of an architect if he can sing like that" [*M.A.P.*, 12th December 1903]. In later years he sang little in public. The composition and proportion of an orchestra naturally appealed to him as being analogous to the proportions of a building—no excess in any one part, but each contributing to form a perfectly balanced structure. In his reply on receiving the Gold Medal, he compared an architect and his associates to a conductor of an orchestra, leading and directing the executants in the interpretation of a work of his own composition. (*JOURNAL*, Vol. XIV. p. 572.)

Mr. Belcher received many honours, as the following list shows:—

Royal Academician (1909); President of the Royal Institute of British Architects from 1904 to 1906, and of the International Congress of Archi-

itects (1906); Vice-President of the International Society of Architects; Membre Agrégé de l'Académie Royale d'Anvers; Hon. Member Society of Architects, Amsterdam, and Hon. Member of the Architectural Societies of Russia, Belgium, Germany, Spain, and the United States; Corresponding Member of the French Society of Architects, of the Society of Architects diplômés by the French Government, and of the Society of Architects, Portugal; Freedom of the City of San Francisco; Gold Medallist, Paris Exhibition, 1900; Royal Gold Medallist, R.I.B.A. (1907).

In 1905 a dinner was held in his honour by his past and present assistants and pupils, when warm expression was given of their appreciation of him as an artist, of the great ability of his work, and of their esteem for him as a man whose influence and personality they so much valued.

The writer of this notice, who was an intimate friend of Mr. Belcher for over fifty years, would have liked to give fuller expression to his appreciation of Mr. Belcher and his work; but it is not only unnecessary but impossible for him to add anything to the article by Mr. Mervyn Macartney in the *JOURNAL* for the 22nd November, and to the sympathetic speeches by Mr. Guy Dawber and Professor Beresford Pite, in which so touching a tribute is paid to our late colleague's lovable personality and artistic genius. "Those who knew him longest must have loved him most."

Mr. PHILIP M. JOHNSTON, F.S.A. [*F.*], writes:—

I gladly comply with the request to communicate my personal recollections of John Belcher, whose somewhat sudden decease all are deploring.

When I became his pupil, in 1881, he was "John Belcher junior," of Messrs. J. & J. Belcher, his father, who lived for some ten years after that date, having retired from active practice. Father and son had for long been close personal friends of my own father; and my elder brother, George Hamilton Johnston, who died in 1878, had preceded me as a pupil. The office then was at No. 5 Adelaide Place, London Bridge, opposite to Fishmongers' Hall, and I recollect that it used to be said that Mr. Belcher senior, in his early married life, had lived on the top floor of the building, over the office. It was a very homely office in those early days. James Walter James, an Associate of the Institute, was closely associated with Mr. Belcher in practice, and Arthur Belcher, a younger brother, was senior assistant. The work done, besides competitions (which were rarely successful), consisted of large city offices and warehouses, of which those for Messrs. Rylands of London Wall stand out in my memory—houses such as that for Sir John Thornycroft, on Chiswick Mall, a Cottage Hospital at Norwood, an early instance of this type of building—and, very occasionally, a bit of church building or restoration.

In 1882 Arthur Beresford Pite, now so well known as Professor Pite, came to Mr. Belcher as an "improver," and remained after his year's work as an assistant, leaving to take up the sub-editorship of *The Builder*, and returning in 1885. His magnetic personality influenced Mr. Belcher very strongly, and left its impress on the character of the work turned out. This was markedly the case in regard to the designs for the enlargement and restoration of Stowell Park, Gloucestershire, the seat of the Earl of Eldon, carried out between 1884 and 1887, and in the remarkably successful building for the Institute of Chartered Accountants, Moor-gate Place, which may be said to have started a new phase in modern civic architecture, and to have produced numerous imitations.

During the last year of my pupilage, 1885-6, a somewhat elaborate church restoration—that of South Marston, Wilts—was undertaken by Mr. Belcher, who handed over to me most of the detail work and supervision. With the exception of Kington Church, Warwickshire, restored a few years previously, and of Stowell Church, Gloucestershire, which was taken in hand after I had left the office, Mr. Belcher had little to do with church building and restoration. In 1903, while enlarging the house at Cornbury Park, Oxfordshire, Mr. Belcher restored the small hamlet-chapel of Shorthampton for the same client, Mr. Vernon Watney, and I had the pleasure of assisting him in bringing to light some very noteworthy wall-paintings; but his name is identified with several ecclesiastical designs in connection with the Catholic Apostolic Church: namely, for the completion of Raphael Brandon's grand church in Gordon Square (not carried out);* for the large red brick building in the Camberwell New Road, executed in 1875, and in the limited competition for a new church in Paddington for the same body. Almost the last work upon which Mr. Belcher was engaged, which was, in fact, hardly completed at the time of his death, was the redecoration of the sanctuary in the Camberwell New Road Church, in a portion of which work I had the pleasure of being associated with him. Within the last two or three years Holy Trinity Church, in Kingsway, has been rebuilt from Mr. Belcher's designs in a neo-classic style.

I am not in a position to speak either with fullest knowledge or entire sympathy of the numerous important civic buildings and mansions executed during the last twenty years from Mr. Belcher's designs. Others who have been associated with him during this period of his practice can do so with much better effect. My own immediate knowledge is of his "earlier manner." In this was built his own most charming little house, a

stone's throw from where I write, in that graceful rendering of late Tudor that he always seemed to me to be so peculiarly at home in. Mr. Belcher's literary and musical activities are too well known to need comment from me. Dr. Turpin, the organist, and Professor Ella, were among his close personal friends, and many musical evenings were spent at Redholm with such kindred spirits.

Of the men who passed through Mr. Belcher's office during my time, either as pupils, improvers, or assistants, besides Professor Pite, I recall the following: T. Phillips Figgis [F.], Needham Wilson [A.], H. Watson K. Martin (now, I believe, practising in Australia), Percy Mantell, deceased, Professor H. Wilson, and Arthur H. Belcher [A.]. Another brother, Wm. Douglas Belcher, who died in 1911, had an independent practice, but assisted a good deal in the office. There have, of course, been many other men, some of considerable ability, who have worked under him since my day.

It is difficult to write for publication critically and dispassionately of such a man as Mr. Belcher, to whom one has looked for the greater part of a lifetime both as master and friend; but I may perhaps permit myself one criticism on his personal character. The quality which has always struck me most was his unassuming modesty. In one who has left a record of much really great work, and who in private life was adorned with many gifts and graces, such humility and gentleness as marked Mr. Belcher in his intercourse with all and sundry are refreshingly beautiful, as they are rare qualities in this pushful age.

PHILIP MAINWARING JOHNSTON.

Sir CHARLES NICHOLSON, Bart. [F.], writes:—

In the obituary notice published in the last issue of the *JOURNAL* John Belcher's design for a church at Maida Vale is described as being the prototype of John Sedding's work at Holy Trinity, Chelsea. I was a pupil of Sedding's at the time when the Maida Vale design was first published, but the building of Chelsea Church was three parts finished at the time when I entered Sedding's office.

I venture therefore to make a correction in the interests of historical accuracy, although it is a matter of little moment which of two brother artists first happened to hit upon a certain idea where both were inspired by the single motive of doing what came to the hand of each in the best manner possible. For it is not plagiarism to take an intelligent interest in the works of one's contemporaries, any more than it is plagiarism to study the works of the ancients.

All honour then both to the originator of a new idea, and to his brother artist who has the perception to appreciate it, and perhaps to develop it in the face of prejudice and convention.

CHARLES A. NICHOLSON.

* In about 1895 the "blocks" left by Brandon in the interior were carved, with great success, under Mr. Belcher's superintendence—much to the enhancement of this beautiful church.

THE TOWN PLANNING INSTITUTE.

TOWN Planning is a new activity in this country; and while it has not developed into a separate profession, there are members of several professions who have made a special study or practice of it. Of these some are architects, some engineers, some surveyors, while sociologists and economists have made valuable contributions to the solution of the problems it presents, and men of legal training have worked to determine the constructive effect of the laws which have a bearing on the subject, and to find clear expression for the new regulations required.

As regards the actual planning, the three first-named professions have hitherto shared an activity which has this special character, that it includes work usually associated with all of these professions. No single man can carry out extensive Town Planning schemes without a fair general knowledge of surveying and land development, of municipal engineering and of architecture, especially that very important branch of it which deals with the disposition and grouping of buildings. He must at least know enough of each of these professions to realise his own limitations, and to know when he should seek the advice of an expert in any one branch. It is perhaps natural that some members of each of these professions should think the one to which he belongs peculiarly fitted to undertake the work, consulting the others when necessary. Time alone will show what method of co-operation between them will prove most satisfactory.

Meantime, in a field of work where all alike are beginners, mutual support and interchange of ideas are of special value. For this and other reasons, a group of those engaged in Town Planning have been meeting together for a year or more, spending an evening about once a month cultivating each other's society and hearing each other's views. This group felt that the time had come to carry the matter a step further, and so it was determined to invite a number of others to come together and discuss the formation of a Town Planning Institute.

It was at one time thought by some that a branch of an existing Institute would meet the need of the case; but the general feeling gathered strength that if effective progress was to be made, as those who must be brought together belonged to so many different professions, it would be better to form a separate Institute for this purpose. This view was shared by the larger group invited to attend the recent meeting, at which it was decided to form the Institute. It is proposed that there shall be general members belonging to one of the three professions of architect, engineer, or surveyor, and members associated with these who belong to the legal or other professions and who have specialised in one or other branch of Town Planning.

The objects aimed at by the Institute are to advance the study of Town Planning and civic design, to promote the artistic and scientific development of towns and cities, and to secure the association of those engaged or interested in the practice of town planning. It is not intended that the Institute shall be a propagandist body or cover in any way ground already well occupied by the Garden Cities and Town Planning Association, the National Housing and Town Planning Council, or the London Society; rather, that the Institute shall do for town planners, irrespective of the particular profession from which they may be drawn, what the other professional Institutes do for their members.

At the meeting which was held on 21st November the following were elected Honorary Vice-Presidents:—

The Right Hon. John Burns, M.P.
Sir John Wolfe Barry.
Sir Alexander Stenning.
Sir Aston Webb.

It is hoped that these gentlemen will form a small Council of Reference representing the different aspects of the subject.

For the first Council the following were elected:

<i>Architects.</i>	<i>Engineers.</i>
S. D. Adshead.	J. A. Brodie.
H. V. Lanchester.	J. W. Cockrill.
P. T. Ranton.	W. T. Lancashire.
Raymond Unwin.	H. E. Stilgoe.
<i>Surveyors.</i>	<i>Associated Members.</i>
Thomas Adams.	E. R. Abbott.
W. L. Davidge.	J. S. Birkett.
G. L. Pepler.	

Mr. G. L. Pepler has kindly consented to act as Honorary Secretary and Treasurer for the time being. It is hoped that in due course a place may be found in the Institute for Students of the subject and Associates who are beginning their practice; while as Honorary Members there will be associated with the Institute persons of distinction who have taken a special interest in town planning, including town planners of other nationalities.

Extensions of the Town Planning movement are rapidly taking place, others are foreshadowed, and there can be no doubt that such an Institute as is contemplated should prove of great value in guiding the work into right lines.

RAYMOND UNWIN [F.].

Mr. Batsford's "Fellowship Books."

The publication is announced of the second six volumes of this charming series—viz., "Fairies," by G. M. Faulding; "Freedom," by A. Martin Freeman; "Solitude," by Norman Gale; "A Spark Divine: a Book for Animal Lovers," by R. C. Lehmann; "Childhood," by Alice Meynell; and "Romance," by Ernest Rhys. The volumes are elegantly printed and bound, are of a convenient size for the pocket, and serve admirably for the little mementoes that people exchange with their friends at this season.

STATUTORY REGISTRATION OF ARCHITECTS.

REPORT AND RECOMMENDATIONS OF THE COUNCIL.

Submitted for the consideration of Members of the Royal Institute of British Architects at a
Special General Meeting, held Monday, 1st December 1913.

[N.B.—The various documents referred to in the Report of the Registration Committee (p. 82), which were not before the Meeting last Monday, are included herewith, by direction of the President, in accordance with his statement at the Meeting. They form Appendices B, C, D, E.]

On the 8th January 1912 the proposals of the Council for the absorption of the Society of Architects and the promotion of a Registration Bill were submitted to a General Meeting of the Royal Institute and referred back to the Council for further consideration. The Council thereupon appointed a Committee, with numerous representatives of the provincial Societies, to consider the whole question of Registration and to report to the Council upon it.

The Registration Committee devoted more than twelve months to an exhaustive discussion of the business referred to them, and on 28th March 1913 presented to the Council a Report, of which a copy is appended (Appendix A). It will be seen that the Report emphasised the fact that in the opinion of the expert advisers of the Royal Institute there is very little prospect of any Bill for the Statutory Registration of Architects becoming law in the near future, and stated that, in the opinion of that Committee, "many years must elapse and great (possibly useless) expenditure must be incurred before Registration by Statute can be effected."

The Council, acting on the advice of the Registration Committee, decided to obtain the opinions of the Councils of the Allied Societies upon the alternative policies suggested in the Report—namely, that of proceeding at once with the Bill as drafted, or, in the alternative, that of obtaining by a new Charter the recognition by the Privy Council of the compulsory Examinations of the R.I.B.A. for all intending Architects, and of such a Scale of Charges as the Privy Council may approve.

In April 1913 copies of the Report of the Registration Committee were sent confidentially to these bodies, and they were requested to give careful consideration to it and to submit their opinions to the R.I.B.A. Council in due course. The Council meanwhile decided to appoint a representative Committee, to be called the Constitutional Committee, for the purpose of considering all matters that might affect the constitution, organisation, and functions of the Royal Institute. As the Bill drafted by the Registration Committee had a serious bearing upon these points, the Report was referred to this Committee, who were requested to consider it from the constitutional point of view, and to report to the Council upon the alternative policies suggested by the Registration Committee.

The Constitutional Committee carefully considered the subject referred to them, and had the advantage of having before them the opinions received, up to date, from the Councils of the Allied Societies. A brief précis of these replies is contained in Appendix F.

Though some of the replies are in favour of proceeding with a Registration Bill in Parliament, the Council are strongly impressed by the reluctance of others to take such a course, and by the opinion so definitely expressed by the Registration Committee as to the extreme difficulty of getting such a Bill placed upon the Statute Book.

The Resolutions of the General Meeting of 4th March 1907 committed the Institute to the policy of endeavouring to obtain the Statutory Registration of Architects through the Institute; but it now appears to the Council that the possibility of obtaining such legislation is extremely remote, and they are further of opinion that the Supplementary Charter of 1909 and the By-Laws governing the Licentiate class, and also the By-Laws made under the Charter of 1887 which limit the voting power of the Associate class, present serious obstacles to Parliamentary action by the Royal Institute.

The Council point out that the Charters and By-Laws of the R.I.B.A. would be materially affected by a Registration Bill, and that a Bill cannot be successfully promoted unless it has the express support of all classes of Members of the Institute, whose opinion must be obtained and recorded at General Meetings, and, inasmuch as at such Meetings Licentiates cannot vote, the express support of this class cannot be obtained.

The Council are therefore of opinion that it is essential to remove the disabilities referred to above before any further action can be taken in respect of Registration by the Royal Institute.

Under these circumstances the Council are of opinion that the Institute would be well advised to adopt the alternative policy suggested in the Report of the Registration Committee, and to apply to the Privy Council for a new Charter, which would at the same time obtain for duly qualified Architects a public recognition of their qualifications, give them substantial benefits which cannot be obtained at present by any other means, and remove the existing obstacles in the way of any future Parliamentary action.

The Council are of opinion that the time has come to present a petition praying His Majesty to grant a new Charter containing such further privileges and powers as are required to promote effectively the advancement of Architecture by enabling the R.I.B.A. to register and to distinguish persons qualified to practise, and that His Majesty should be asked to ordain as follows :—

- (1) That all persons who at the time of the granting of the Charter have received a diploma of Membership and the rank either of Fellow, Associate, or Licentiate, and all persons being members of and approved by a Society allied with the R.I.B.A. or of any branch of the R.I.B.A. who at the time of the granting of the Charter are shown to be engaged in the practice of Architecture, and all persons who after the granting of the Charter shall have been examined and duly approved by the Council of the R.I.B.A., shall have the exclusive right to use and may use the distinctive title "Chartered Architect," in addition to any other diploma, rank, title, honour, or dignity to which such person may be entitled. That the Royal Institute shall be empowered to make and maintain a Register of all persons entitled to use the distinction of "Chartered Architect."
- (2) That the R.I.B.A. be authorised, notwithstanding any disabilities at present existing, to make or amend By-Laws to ensure to all classes of Members adequate representation on the Council and Standing Committees and in all matters affecting the advancement of Architecture and in the control of Chartered Architects.
- (3) That the Council of the R.I.B.A., for the purpose of assisting and directing Architectural Education and testing the qualification of persons desirous of practising Architecture, be authorised to control all Examinations held to qualify for the distinction of "Chartered Architect," and, subject to the approval of the Privy Council, to appoint Examiners for the conduct of such Examinations. That the Council of the R.I.B.A. be authorised to charge to candidates for Examination and to Chartered Architects on receiving distinctions or diplomas granted by the R.I.B.A., such fees, annual and otherwise, as the Privy Council may approve, and to pay Examiners such fees as the Council of the R.I.B.A. may determine and the Privy Council may approve.
- (4) That the Council of the R.I.B.A. be authorised to permit persons who have passed such Examinations in Architecture as shall have been approved by the Council of the R.I.B.A. to use the distinction of "Chartered Architect."
- (5) That the disabilities imposed by previous Charters and the By-Laws on Associate Members be repealed, and that all Chartered Architects on obtaining Associate rank of the R.I.B.A. be permitted to vote on all matters connected with the management of the Institute, including the Charters and the By-Laws.
- (6) That the disabilities imposed by previous Charters and By-Laws on Licentiates be repealed and that Chartered Architects holding Licentiate rank of the Institute be permitted to serve on the Council or on any Committee if duly elected and to be represented on the Council or on any of the four Standing Committees of Art, Literature, Practice, and Science by duly elected representatives.

That the Council of the R.I.B.A. be enabled to constitute representatives of the Licentiate class, to a number not exceeding 10 to every 100 Licentiates at any time in the class, to be elected by the Licentiates in a manner to be hereafter determined.

That such representatives be empowered to vote on behalf of the Licentiate class at any General Meeting specially convened for the purpose of dealing with any matter affecting the rights, privileges, emoluments, or discipline of Chartered Architects, and to vote on behalf of the Licentiate class in the election of the Council and the Standing Committees.

- (7) That the Council of the R.I.B.A. be reconstituted and consist of :—

1 President.
 4 Vice-Presidents.
 1 Hon. Secretary.
 21 Fellows.

10 Associates.

Such numbers of the Presidents of Allied Societies as the Council may determine.

1 Representative of the Architectural Association.

The Chairmen of the four Standing Committees (*ex officio*).

The Chairman of the Board of Architectural Education (*ex officio*).

1 Licentiate representative to each complete 400 members of the Licentiate class, the number of representatives at no time to exceed five.

That the Council be given power, by Resolution of the Council confirmed by the General Body, to alter the relative proportions of their Members and to add to or diminish their numbers.

- (8) That the Royal Institute be empowered, subject to the approval of the Privy Council, to issue a Scale of Fees payable to Chartered Architects.
- (9) That the Royal Institute shall be able and capable in law to purchase, possess, hold and enjoy a Hall, Messuages, Lands, and Tenements or Hereditaments of a yearly value not exceeding £5,000 per annum.*
- (10) That subject to the provisions contained in the new Charter the other Charters of the Institute shall, so far as unrepealed, have full effect and validity, and shall be confirmed accordingly.

APPENDIX A.

REPORT OF THE REGISTRATION COMMITTEE, 1912-13.

To the President and Council, Royal Institute of British Architects,—

GENTLEMEN,—The Committee investigating Registration, being of opinion that it is advisable to acquaint the Council with the stage which the inquiry has now reached, beg leave to report to the Council thereon as follows :—

The Committee have held fifteen meetings.

1. After considering the *established principles* governing Registration and the position created by the action already taken by the R.I.B.A., the Committee first submitted a complete case for Registration as it stands to-day to Messrs. Markby, Stewart & Co., Solicitors, and Mr. John Kennedy, Parliamentary Agent, and were by them advised that a Bill strictly in accordance with the established principles appeared to be impracticable for the following among other reasons :—

(a) That the established principles are not suitable material on which to frame a Bill.

(b) That it is contrary to public policy and Parliamentary practice to create such a monopoly as would result from a measure based on the established principles as defined by the Reports, recommendations, and resolutions set out in Appendix B, and no public case can be made out in justification.

(c) The action taken by the R.I.B.A. in pursuance of the course authorised and based on the established principles has failed to achieve the expected and desired result, the whole of the practising Architects not being included in the membership, and now cannot be, as the Class of Licentiates is closed.

(d) That if such an Act were passed, a complete class of Members (namely, Licentiates) would be amenable to statutory control without representation on the Governing Body.

They would thus be in a worse position under the Act than members of Allied or other Societies, and this cannot be altered in view of the terms of establishment and conditions under which this class has been formed and Members admitted.

2. In the position thus disclosed the Committee felt that a Report which merely stated these facts would be useless, and that it would be impossible for the General Body to arrive at a proper decision unless at least a suggestion for a Parliamentary Bill suitable to the position which has arisen was simultaneously placed before it.

The Committee, therefore, proceeded to consider a measure on these broad lines such as the Committee believe the profession now demands, and which, moreover, they were advised is the only practical solution if Registration is to be effected by Statute.

The Draft Registration Bill of 1905, having been recommended to the Committee by Messrs. Markby, Stewart and Mr. Kennedy as a suitable measure of this kind, was accordingly considered, and, having

* At the present time the yearly value as fixed by Charter is £2,000. Having regard to the present value of property owned by the Institute this is not considered sufficient, and an amount should be ordained by Charter somewhat in excess of the present total value of the real estate and leasehold property of the R.I.B.A.

Reason for report.

Solicitors and Parliamentary Agent consulted.

Reasons :
Principles unsuitable for Bill.
Contrary to public policy, consequently no public case.

Past action has failed to achieve desired result.
Disabilities of one class.

Resulting position and action adopted.

Draft Bill of 1905 considered and amended.

been thoroughly revised and brought up to date, is now presented to the Council, the Committee being of opinion that as this Draft Bill as now revised goes beyond the principles adopted by the General Body on March 4, 1907, the Council should consider and come to a decision upon it before any further steps are taken by the Committee.

3. The Committee desire to emphasise the fact that they are advised there is very little prospect of any Bill of this nature becoming law in the near future:

Parliamentary prospects.

Firstly, by reason of its subject-matter.

Secondly, in consequence of the present congested state of public business.

In confirmation of this view the Committee beg to refer to the fact that analogous Bills promoted by the Chartered Accountants and by the Society of Architects which have been in course of promotion for many years past cannot be said even yet to have emerged into the Parliamentary arena.

4. It is only fair to state that the Committee were not unanimous about the Bill, and that widely divergent views were held on the subject generally and on its principles, procedure, and details.

Divergent views. Opposition to be expected.

From the discussions which have taken place in the Committee, and from the evidence before us, we are of opinion that many years will elapse and great (possibly useless) expenditure must be incurred before Registration by Statute can be effected.

Registration being so complex and controversial a subject, there seems every prospect that when the present position is explained to the General Body of Members, and the Bill is laid before them, a similar divergence of opinion will be found and considerable opposition will be encountered.

5. This, in conjunction with the urgent need for some action to be taken by the R.I.B.A. to allay the agitation, now of many years' standing, and detrimentally affecting the welfare of all practising Architects, suggests the necessity for the Council to call the General Body of Members together at an early date for the following purposes:—

Necessity for action.

(a) To receive the Reports of the Solicitors and Parliamentary Agent.

Steps suggested.

(b) To examine the Bill as drafted and, having done so, to decide:—

(1) Whether an attempt should be made to get the Bill passed as drafted, or with such modifications as may be found necessary; or, if not,

(2) Whether some alternative course apart from Statutory Registration should be determined on, such as obtaining by a new Charter the recognition by the Privy Council of the compulsory Examinations of the R.I.B.A. for all intending Architects, and of such a Scale of Charges as the Privy Council may approve.

6. In conclusion and explanation we venture to point out that a review of the evidence necessary for the preparation of this Report has forced upon us the opinion that there are very serious difficulties in the way of obtaining Statutory Registration, and that, having regard to the great importance of the subject, the Council should consider the advisability of submitting this Report to all the Allied Societies before presenting it to the General Body.

We have the honour to be,

Mr. President and Gentlemen,

Your obedient Servants,

JOHN SLATER, *Chairman*.

C. STANLEY PEACH.

28th March 1913.

APPENDIX B.

PRÉCIS OF THE ESTABLISHED PRINCIPLES ABSTRACTED FROM THE FOLLOWING DOCUMENTS:—

Report of the Registration Committee dated 20th March 1906.

Resolutions thereon carried at the General Meeting held 3rd April 1906.

Report of the Council on the resolutions regarding the question of registration passed 3rd April 1906, and dated 25th February 1907, approved by resolution of the General Body on the 4th March 1907.

The Committee having heard evidence from all parts of the United Kingdom, found as a fact that there was a general desire to obtain a legal status for duly qualified architects.

General desire for registration.

Recom-
mendation.

Suggested
procedure.

The Committee recommended application to Parliament for a legal Diploma of Membership R.I.B.A.
The Committee suggested as means to this end :—

- *(1) Revision of the Charter.
- (2) Submission of a Bill to Parliament.
- *(3) Alteration of method of electing Fellows.
- *(4) A compulsory scheme of education.
- *(5) The creation of a new class to be called Licentiates without power to vote.
- (6) Increase of disciplinary powers and the right to appeal.

Bill to Parliament to provide for :—

- (1) Power to the R.I.B.A. to supervise education and hold examinations for diploma.
- (2) To confirm present titles of Members.
- (3) To give statutory force to present Charters.
- (4) To legalise a scale of charges.

Note.—The Council were authorised to consider these suggestions and report, and to take the steps necessary to obtain a Supplementary Charter, and to present Bill to Parliament when scheme above outlined perfected.

By the Report of the Council dated 4th March 1907, the foregoing was amplified and explained, a procedure suggested, and the whole summarised into principles as follows :—

Principle A.—The R.I.B.A. to endeavour to obtain Parliamentary recognition of membership.

Principle B.—After fixed date diploma only to be granted after passing definite course of education.

Principle C.—Temporary class of Licentiates without voting power to be established ; to be open for twelve months after Charter obtained.

Principle D.—Fellows to be elected from Associate Class by Council in special cases.

Principle E.—Disciplinary powers of the Institute to be increased by obtaining powers to publish expulsion of Members in the public Press.

The following points were enunciated as essential in any Act of Parliament :—

Principle F.—The public to be enabled to distinguish between architects recognised by a competent authority as qualified or otherwise.

Principle G.—To extend the Charter privileges of the R.I.B.A., making it the statutory authority for the education and examination of architects for admission to the Institute.

Principle H.—To legalise the scale of charges.

APPENDIX C.

PRÉCIS OF THE ADVICE AND RECOMMENDATIONS ON REGISTRATION OF MESSRS. MARKBY, STEWART & CO., INSTITUTE SOLICITORS, AND MR. JOHN KENNEDY, PARLIAMENTARY AGENT OF THE INSTITUTE.

The Reports are dated February 1912 and October 1912.

The latter Report was verbal and was reported to the Committee by the Sub-Committee 4th November 1912.

On the assumption that the R.I.B.A. desires to promote a Bill on broad lines, Messrs. Markby, Stewart & Co. and Mr. John Kennedy advise :—

1. Well advised to consider and bring up to date Draft Registration Bill of 1905 prepared with assistance of Mr. Cripps, K.C., and Mr. Clode.

2. Bill probably be opposed by various kindred institutions and societies, Municipal Authorities, many Members of Parliament, and not likely to obtain facilities or support from Government.

* N.B.—Action since taken in respect of these items.

3. Little prospect of passing into law at an early date unless compromise effected by abandoning registration and retaining merely statutory recognition of Institute examinations and Scale of Charges.

4. Bill might be introduced to feel pulse of Parliament and gauge opposition.

4A. An alternative course.—To invite general conference of kindred societies and professions with a view to preliminary or joint action.

Advisable in any case to get in touch with Government Departments, notably :—

The Local Government Board.

The Board of Trade.

The Board of Education.

5. Consider the public case which can be presented to Parliament in justification. Advice of solicitors and Parliamentary Agents on prospects of a Bill based on resolutions and established principles of 1906-7.

(a) The prospect of passing any form of Bill of this nature is hopeless in the present congested state of Parliamentary business.

(b) A Bill embodying simply established principles inadvisable as they do not contain suitable material for a Bill.

(c) As showing generally the hopelessness of a Registration Bill they cite case of Chartered Accountants on whose behalf have been acting for some years endeavouring to obtain statutory recognition.

No progress been made ; great expense incurred.

In a letter dated March 7 1912 to the Secretary, Mr. John Kennedy stated that no Bill embodying the established principles would as a private Members' Public Bill have any reasonable prospect of passing into law.

And

the time and money expended by the promoting Bodies on this Bill (Chartered Accountants) is certainly a warning to your Institute not to lightly embark on a similar venture.

APPENDIX D.

PRÉCIS OF THE DRAFT REGISTRATION BILL OF 1905 AS REVISED AND AMENDED BY REGISTRATION COMMITTEE, 1912-13, REFERRED TO IN THE INTERIM REPORT OF THE COMMITTEE TO THE COUNCIL DATED 28th MARCH 1913.

OBJECTS.

Objects

Educational for the general advancement of architecture.

To distinguish qualified from unqualified architects.

To limit the use of the title " Architect " to qualified persons.

To create a board to prescribe examinations and to register architects and to exercise disciplinary powers over them.

PROVISIONS.

Partnerships, societies or associations are not eligible for enrolment.

On the passing of the Act the following are eligible for enrolment :—

Fellows, Associates, and Licentiates R.I.B.A., Members (in *bona fide* practice) of Allied Societies, the Society of Architects, the Ulster Society.

Persons who have passed approved examinations.

Persons who have been in practice for two years prior to passing of Act.

Persons who have been for ten years pupils, apprentices, or assistants.

Persons who have passed prescribed examinations.

Persons who have passed Institute examinations.

Combinations ineligible.

Persons eligible at time of passing of Act.

After passing of Act.

Constitution
of Board.

The Constitution of the Board :—

The President. The President for the time being of the R.I.B.A., who is always to be President of the Board.

The Council of the R.I.B.A.

Presidents of Allied Societies if Fellows R.I.B.A.

If nominated :—

One representative of Society of Architects.

One representative of Ulster Society.

Maximum of *ten* representatives nominated by Privy Council.

Election
to the Board.

Election to the Board is to be annually after the first two years.

Members eligible for re-election.

Duties
of the Board.

Subject to approval of the Privy Council the Board may :—

Regulate its own proceedings.

Prescribe examinations for enrolment.

Issue and cancel certificates.

Enrol and strike off Roll.

Keep and publish Roll.

Fix fees for examinations.

Disciplinary
powers.

The following renders persons ineligible and liable to be struck off Roll after defence, with power to appeal, and in certain cases liable to be fined :—

Convicts and felons and persons fraudulently or incorrectly enrolled.

Persons guilty of disgraceful professional conduct.

Treasury and
surplus funds.

The R.I.B.A. is to act as Treasurer for the Board.

R.I.B.A. entitled to dispose of surplus funds for objects of architectural advancement.

Obligation on R.I.B.A. to keep and publish accounts.

Fees and
scale of fees.

Enrolled architects can recover fees, others cannot.

Scale of fees according to Schedule R.I.B.A. if approved by Privy Council.

APPENDIX E.

DRAFT REGISTRATION BILL.

MEMORANDUM

The Bill is promoted by the Royal Institute of British Architects incorporated by Royal Charters 7 William IV., 50 Victoria, and 8 Edward VII. for the general advancement of Civil Architecture and for promoting and facilitating the acquirement of the knowledge of the various arts and sciences connected therewith.

By their Charter the Institute was entrusted with and now possess powers of examining candidates for their Diploma, and by these means of exercising a salutary influence upon the profession of Civil Architecture.

During the period which has elapsed since its incorporation the Institute has become and now is the body which is most representative of the profession, and this position has been so far recognised by Parliament that their Certificate of Competency has been made by Statute necessary for the discharge of the responsible public office of District Surveyor.

The objects of the Bill are :—

(A) To enable persons requiring professional aid in the design and construction of buildings to distinguish qualified from unqualified practitioners, and to prevent untrained and incompetent persons, styling themselves architects, from imposing on the community to its material loss, danger, and detriment ;

(B) To confine the use of the title " Architect " to persons enrolled under the provisions of this Bill, and also to provide for the maintenance of a Register of all such qualified persons ;

(c) To create an Administrative Board of Architecture composed of the Council of the Institute, representatives of the Societies of Architects other than the Institute, and also representatives (not exceeding ten) of Universities, Institutes, and other bodies which the Privy Council may determine to be entitled to representation. Such Board to prescribe the examinations entitling to enrolment, the issue and cancellation of certificates and the removal or restoration of names from and to the Register, and generally to exercise disciplinary power over all architects with the object of promoting their efficiency and usefulness. Any rules framed by the Board to be valid only if approved by the Privy Council.

The Promoters would point out that they do not in promoting this Bill limit or in any way affect the right of those persons practising as surveyors or as builders from exercising their respective callings in as ample a manner as heretofore so long as they do not use the title of architect.

Arrangement of Clauses.

Clauses.

1. Enrolment.
2. Provision for persons now qualified.
3. Qualifying examination for enrolment.
4. Constitution of Administrative Board of Architecture.
5. Duties of Administrative Board.
6. Roll to be kept.
7. Printed copies to be published annually and to be evidence of contents of roll.
8. Registrar.
9. Refusal to register.
10. Removal of names and alteration of roll.
11. Removal of names of convicted persons, &c.
12. Appeal from decision of Administrative Board.
13. Restoration of names removed.
14. Fees.
15. Application of fees.
16. Penalty for obtaining a certificate by false representation.
17. Penalty for wilful falsification of roll.
18. Scale fees.
19. Act not to apply to naval architects.
20. Interpretation.
21. Short title and commencement.

SCHEDULES.

A BILL TO SECURE THE ENROLMENT OF ARCHITECTS.

Be it enacted by the King's most Excellent Majesty by and with the advice and consent of the Lords Spiritual and Temporal and Commons in this present Parliament assembled, and by the authority of the same, as follows :—

1.—(1) After the first day of * a person shall not be entitled Enrolment.
to describe himself as an architect whether by advertisement, by description on his place of business, by any document issued by him or otherwise, unless he is enrolled as an architect in pursuance of this Act.

(2) If any person either alone or in conjunction with any other person or body of persons knowingly describes himself as an architect in contravention of this section, either by taking or using any other name, title, abbreviation, letters, or description calculated to induce people to believe that he is enrolled under this Act or is a person qualified to practise architecture, he shall be liable on summary conviction to a fine not exceeding *twenty pounds*, and to be restrained by injunction or interdict from using such description.

* A date to be hereafter decided.

(3) Partnerships, Societies, or other associations of persons carrying on business under a common name, and whether corporate or incorporate, shall not be entitled to be enrolled under this Act.

Provision for
persons now
qualified.

2. Any person who within one year from the date of this Act coming into operation claims to be enrolled under this Act shall be so enrolled, provided—

(1) He is either a Fellow or Associate or Licentiate of the Royal Institute of British Architects, or being a member of any one of the Allied Societies or of the Society of Architects or of the Ulster Society of Architects was at the passing of this Act in *bona fide* practice as an architect, or

(2) Has obtained by examination and holds a degree in architecture conferred by any University within the United Kingdom or has such other qualification as may be approved by the Board, or

(3) Proves to the satisfaction of the Board that at the passing of this Act he had been for at least two years engaged as a principal in the *bona fide* practice of architecture, or had served for ten years as pupil, apprentice, or assistant, or partly as one and partly as the other, to a person or persons who at the passing of this Act is or are entitled to be enrolled under this Act.

Qualifying
examination
for enrolment.

3. Subject to the provisions of Section two of this Act no person shall be entitled to be enrolled as an architect unless he has served as apprentice or assistant, or partly as one and partly as the other, for not less than five years with a person enrolled or entitled at the passing of this Act to be enrolled under this Act, and has passed and produces or transmits to the Registrar a certificate under the seal of the Board that he has passed such examinations as to his knowledge of architecture, and of the practice and duties of an architect, as the Board shall from time to time prescribe. Provided always that any person who shall have at any time passed all the examinations required to be passed for membership of the Institute shall, subject to the provisions of this Act, be entitled to enrolment without further examination.

Constitution of
Administrative
Board.

4. From and after the passing of this Act the Administrative Board of Architecture shall consist of

(A) the Council of the Royal Institute of British Architects as annually elected together with those Presidents of Societies allied to the Institute who may not have been elected on the Council, provided they be Fellows of the R.I.B.A.; (B) one person if nominated by the Society of Architects, one person if nominated by the Ulster Society of Architects (so long as these two Societies remain as independent bodies not allied or incorporated with the R.I.B.A.), and such other persons not exceeding ten in number as may be nominated by such other bodies as the Privy Council shall from time to time determine.

The first members of the Board included under (B) shall sit for two years, after which time four of such members shall retire annually, the order of retirement to be determined by ballot, but any person so retiring shall be eligible for re-election. The President of the Board shall always be the acting President of the R.I.B.A. Any vacancy among the persons nominated in Class (B) occurring by resignation or death shall be filled up by the body nominating such persons.

Duties of
Administrative
Board.

5. The duties and powers of the Board shall be as follows:—

(1) To frame rules—

(A) Regulating their own proceedings;

(B) Prescribing the examinations entitling to enrolment.

(2) To issue and cancel certificates.

(3) To decide upon the removal from the roll of the name of any enrolled architect liable to be removed from the roll under the provisions of this Act, and also to decide upon the restoration to the roll of the name of any architect so removed; and generally do any other act or duty which may be necessary for the due and proper carrying out of the provisions of this Act so far as they relate to the Board.

Roll to be
kept.

Rules framed under this section shall be valid only if approved by the Privy Council.

6. A roll shall be kept by the Board subject to the provisions of this Act and to any rules for the enrolment of architects made in pursuance of this Act. Such roll shall contain in one list all architects who are enrolled under this Act and any rules hereunder, and shall be in the form given in Schedule A with such variations as may be required.

Printed copies
to be published
annually, and
to be evidence
of contents of
roll.

7. The Board shall cause a correct copy of the roll to be once in every year printed under their direction and published and placed on sale. A copy of the roll for the time being purporting to be so printed and published shall be admissible as evidence of all matters stated therein, and the absence of

the name of any person from the roll shall be evidence, until the contrary is made to appear, that such person is not enrolled in pursuance of this Act.

8. The Board shall appoint a Registrar, who shall keep the roll in accordance with the provisions of this Act, and any rules hereunder.

9. The Board may direct the Registrar not to enrol any person who is proved to the satisfaction of the Board—

Refusal to register.

(1) To have been convicted in His Majesty's dominions or elsewhere of any offence which if committed in England would be a felony or misdemeanour, or to have been declared by any court of competent jurisdiction to have committed any fraud; or

(2) To have been guilty of disgraceful professional conduct. Provided that such person shall receive one month's notice of the charge brought against him, and have an opportunity of defending himself from the same.

10. The Registrar shall remove a name from the roll in the following cases:—

Removal of names and alteration of roll.

(1) At the request or with the consent of the person whose name is removed;

(2) When the enrolled person is dead;

(3) When required so to do by the Board; and shall from time to time insert in the roll any alteration which may come to his knowledge in the name or address of any person enrolled.

In the execution of these duties the Registrar shall in each case act upon such evidence as appears to him sufficient.

11. The Board may direct the Registrar to remove from the roll the name of any person enrolled in the following cases:—

Removal of names of convicted persons, &c.

(1) Where it is proved to the satisfaction of the Board to have been incorrectly or fraudulently entered;

(2) Where any person enrolled shall be convicted in His Majesty's dominions or elsewhere of any offence which if committed in England would be a felony or misdemeanour or to have been declared by any court of competent jurisdiction to have committed any fraud;

(3) Where, after due inquiry, it is proved to the satisfaction of the Board that the person enrolled has been guilty of disgraceful professional conduct;

(4) Where a person having been enrolled under this Act shall be found by the Board to have entered into or begun to follow any other business or occupation which in the opinion of the Board is inconsistent with that of an architect.

Provided always that before any person's name shall be removed from the roll upon any of the grounds specified in this section, such person shall have one month's notice of the proposal to remove his name from the roll and the grounds thereof, and shall have an opportunity of showing cause against such removal.

12. Any person thinking himself aggrieved by any decision of the Board refusing him enrolment or directing the removal of his name from the roll of architects may appeal therefrom to the High Court of Justice within three months after the notification of such decision to him, but no further appeal shall be allowed.

Appeal from decision of Administrative Board.

13.—(1) Where a name has been removed from the roll at the direction of the Board the name of the person shall not again be entered in the roll except by order of the Board.

Restoration of names removed.

(2) The Board may in any case in which they think fit restore to the roll such name removed therefrom, either without fee or on payment of such fee not exceeding the enrolment fee as the Board may from time to time fix, and the Registrar shall restore the name accordingly.

(3) The name of any person removed from the roll at the request or with the consent of such person shall, unless it might if not so removed have been removed by the direction of the Board, be restored to the roll by the Registrar on the application of such person, and on payment of such fee not exceeding the enrolment fee as the Board shall from time to time fix.

14. Such reasonable fees shall be paid in respect of the several matters and at the times and in the manner set forth in Schedule B to this Act as the Privy Council may from time to time by order signed

Fees

by the Clerk to the Privy Council direct and fix, with a view to meeting the expenses incurred by the Board and the Institute in the administration of this Act.

Application
of Fees.

15. All fees paid under or by virtue of this Act shall be paid to the Institute, and such fees shall be applied as follows:—

- (1) In payment of all expenses incurred by the Board connected with the examination and enrolment and removal of persons enrolled or applying to be examined or enrolled under this Act;
- (2) In payment of the general expenses of the Board and the Institute in connection with and incidental to the provision and maintenance of the roll and the administration of this Act;
- (3) In promoting and facilitating the acquirement of the knowledge of such of the various arts and sciences connected with Civil Architecture as the Institute may from time to time determine.

The Institute shall, as soon as practicable after the thirty-first day of December in each year, publish a financial statement made up to that date showing the receipts and expenditure including liabilities of the Board and the Institute under this Act during the year, which statement shall be certified as correct by an accountant who shall be a Chartered Accountant.

Penalty for
obtaining a
certificate
by false
representa-
tion.

16. Any person who procures, or attempts to procure, himself to be enrolled under this Act by making or producing, or causing to be made or produced, any false or fraudulent representation or declaration, either verbally or in writing or otherwise, and every person aiding and assisting him therein, shall be deemed guilty of a misdemeanour in England or Ireland, and in Scotland of a crime or offence punishable by fine or imprisonment, and shall on conviction thereof be sentenced to be imprisoned for any term not exceeding twelve months.

Penalty for
wilful
falsification
of roll.

17. Any person wilfully making, or causing to be made, any falsification in any matter relating to the Roll of Architects shall be deemed guilty of a misdemeanour in England or Ireland, and in Scotland of a crime or offence punishable by imprisonment, and shall on conviction thereof be sentenced to be imprisoned for any term not exceeding twelve months.

Scale fees.

18. From the date of this Act coming into operation—

(1) The charges for professional services to be made by an architect enrolled under this Act shall in the absence of agreement be the charges of which particulars are contained in the Schedule of Charges of the Royal Institute of British Architects, with such changes as may from time to time be made by that Institute and sanctioned by the Privy Council.

(2) No person other than a person enrolled and holding a practising certificate granted under the provisions of this Act shall be entitled to practise as an architect, or to recover the above or any charges for services rendered in the capacity of architect.

Provided that nothing herein contained shall prejudice the right of professional members of the Institution of Civil Engineers or Surveyors' Institution to recover charges for work of any kind falling within the duties of their respective callings.

Act not to
apply to naval
architects.

19. Nothing in this Act respecting architects shall apply to persons practising as naval architects.

Interpreta-
tion.

20. In this Act—

The term "the Council" means the Council of the Institute.

"The Institute" means the Royal Institute of British Architects, incorporated by Royal Charters, 7 Wm. IV. and 50 Vict. and 8 Edward VII.

The "Allied Societies" means the following Institutes, Societies, and Associations, viz.:

- Royal Institute of Architects of Ireland.
- Manchester Society of Architects.
- Nottingham and Derby Architectural Society.
- Leeds and Yorkshire Architectural Society.
- Birmingham Architectural Association.
- York and Yorkshire Architectural Society.
- Leicester and Leicestershire Society of Architects.
- Glasgow Institute of Architects.
- Bristol Society of Architects.

Sheffield Society of Architects and Surveyors.

Aberdeen Society of Architects.

Edinburgh Architectural Association.

Northern Architectural Association.

Liverpool Architectural Society.

Devon and Exeter Architectural Society.

Dundee Institute of Architects.

South Wales Institute of Architects.

Northamptonshire Association of Architects.

Hampshire and Isle of Wight Association of Architects, and such other Institutes, Societies and Associations in the United Kingdom as shall from time to time be allied to the Institute under the provisions in that behalf contained in the Charter and By-laws of the Institute.

"Architect" means a person enrolled under this Act;

"Board" means the Administrative Board of Architecture created by this Act.

21. This Act may be cited as the Architects Act, 19 .

It shall come into operation on the day of One thousand nine hundred and

Short title
and com-
mencement.

SCHEDULE A.

SCHEDULE B.

Name.	Address.	Date of Roll.	How Admitted.	Designation and Distinctions.	Nature of Fee.	When to be paid.	To whom to be paid.
					For enrolment of name of architect under provisions of Section 2.	On application and before enrolment.	To the Registrar at the Institute.
					For enrolment of name of any person other than as above.	Ditto.	Ditto.
					Annual fee to be paid by every enrolled architect taking out a practising certificate.	On or before November 30 of each year in respect of the year commencing January 1 following.	Ditto.
					On entry of any candidate for final qualifying examination.	At time of entering.	Ditto.
					On entry of any candidate for any examination other than as above.	Ditto.	Ditto.

APPENDIX F.

PRÉCIS OF REPLIES RECEIVED FROM THE COUNCILS OF THE ALLIED SOCIETIES.

THE ABERDEEN SOCIETY OF ARCHITECTS.—The Council expressed general approval of the draft Registration Bill as embodied in the Report.

THE BIRMINGHAM ARCHITECTURAL ASSOCIATION.—The Council are of opinion that it appears inadvisable to proceed with the presentation of the Registration Bill in view of the advice received as to the remote chance of its becoming law and the expense entailed.

THE BRISTOL SOCIETY OF ARCHITECTS.—Having regard to all the circumstances, the best course to adopt will be that suggested in Section 5, Sub-section (2), of the Interim Report.

THE DEVON AND EXETER ARCHITECTURAL SOCIETY.—The Council have passed the following Resolution: "This Society recommends that the suggestion on page 2, Sub-section 5 (B) (1), of the Interim Report of the Registration Committee be furthered, subject to a General Conference of kindred Societies and Professions, with a view to joint action."

THE DUNDEE INSTITUTE OF ARCHITECTS.—The Council have not yet completed their consideration of the Report.

THE EDINBURGH ARCHITECTURAL ASSOCIATION.—The Council have not yet completed their consideration of the Report.

THE GLASGOW INSTITUTE OF ARCHITECTS.—The Council have passed the following Resolution: "That, while thoroughly approving of the proposal contained in the draft Registration Bill, and desirous that the R.I.B.A. should keep the objects thereof steadily in view and use all feasible means of advancing the scheme, they consider, in view of the opinion given by the Parliamentary Agent and Solicitors, that the present is not an opportune time to promote the Bill before Parliament."

THE HAMPSHIRE AND I. W. ASSOCIATION OF ARCHITECTS.—The Council agree that a scheme of Registration is most desirable and that this should be inaugurated under the auspices of the R.I.B.A.

THE LEEDS AND YORKSHIRE ARCHITECTURAL SOCIETY.—The Council agree with the Report as to the present position, but, in their opinion, the general feeling of this Society would be unanimously in favour of the work being continued now that so much has been done, and the Royal Institute is considered to be pledged to do this.

THE LEICESTER AND LEICESTERSHIRE SOCIETY OF ARCHITECTS.—The Council hope that the Bill will be presented to Parliament at as early a date as possible. It would be wise, without further loss of time, to approach the kindred Societies and the various Government Departments interested in building in order to ascertain their views on this matter.

THE LIVERPOOL ARCHITECTURAL SOCIETY.—The Council have not yet completed their consideration of the Report.

THE MANCHESTER SOCIETY OF ARCHITECTS.—Whilst the Council are of opinion that a Registration Bill is desirable, it is felt, in view of the difficulties surrounding the matter as expressed in the R.I.B.A. Registration Committee's Report, that it is better not to proceed with the proposed Registration Bill, but rather to obtain a new Charter on the lines laid down in Paragraph 5, Section (b), Clause 2, of the Interim Report of the Registration Committee dated 28th March 1913. In addition, this Council thinks it desirable that the draft Registration Bill, as prepared, be submitted to the members of the R.I.B.A. and settled ready for submission to Parliament when the Council of the R.I.B.A. shall think fit.

THE NOTTINGHAM ARCHITECTURAL SOCIETY.—The best course to adopt is to follow the advice of the Solicitors and the Parliamentary Agent of the Institute on page 4, Appendix C, Clause 4 A, "To invite a General Conference of kindred Societies and Professions with a view to preliminary or joint action."

THE NORTHERN ARCHITECTURAL ASSOCIATION.—This Council is of opinion that a Registration Bill is necessary. In view, however, of the difficulties of obtaining the Bill as explained in the Report of the Registration Committee, the Council agree that an application be made to the Privy Council for a new Charter. The Council are further of opinion that the granting of a new Charter should be only the preliminary to the active promotion of a Registration Bill.

THE NORTHAMPTONSHIRE ASSOCIATION OF ARCHITECTS.—The Council do not consider it advisable to proceed with the Registration Bill.

THE ROYAL INSTITUTE OF THE ARCHITECTS OF IRELAND.—The Council are in favour of the Bill being passed, subject to such modifications as may be considered desirable and necessary.

THE SHEFFIELD SOCIETY OF ARCHITECTS.—The Council considers that under the circumstances mentioned in the Interim Report of the Registration Committee it is not desirable to proceed further with a Registration Bill at the present time.

THE SOUTH WALES INSTITUTE OF ARCHITECTS.—The Council have not yet completed their consideration of the Report.

THE YORK AND YORKSHIRE ARCHITECTURAL SOCIETY.—The Council, although not wishing to urge the R.I.B.A. to proceed with the Bill against the advice of their experts, unanimously agree with its principles. If the General Body desire to proceed with the Bill the Council of this Society would support their decision.

DISCUSSION ON THE REPORT AND RECOMMENDATIONS OF THE COUNCIL IN REGARD
TO THE STATUTORY REGISTRATION OF ARCHITECTS, AT THE SPECIAL
GENERAL MEETING HELD MONDAY, 1st DECEMBER 1913.

Mr. REGINALD BLOMFIELD, A.R.A., *President*, in the Chair.

THE PRESIDENT: The importance of this meeting and of this business is shown by the large attendance here to-night. It is a question which affects architects all over the country. It has hung over the Institute and divided our counsels for something like twenty-five years. I shall not delay you long with introductory remarks, but I would like to remind some of our members, and especially the younger ones, of the amount of time and thought and anxious consideration which members have given to this question. I find, on the figures which the Secretary has been good enough to collect for me, that the question of the registration of architects first came before us officially in 1887. Registration Bills were brought forward in 1888, 1889, 1891, 1893, 1895, and 1900. They all failed, and their failure was due largely to the Opposition of the Royal Institute, whose members felt that these Bills were inadequate, unsatisfactory, and impracticable. (Hear, hear.) With 1900 closed what you might call the first phase of the question. The question again became a burning one, and after various vicissitudes a Bill was brought forward by the Council of the Institute in 1905 which did not meet with the full acquiescence of the general body. There were provisions in it which they disliked, and which many of them have continued to dislike. This created a good deal of difference of opinion amongst our members, and at about that time, under the Presidency of Mr. John Belcher, a serious and very earnest attempt was made at compromise. It was endeavoured to reconcile all the various shades of opinion and try to arrive at some *via media* which would meet all our varying points of view. A compromise was, in fact, unanimously arrived at in 1907. From then till 1910 and afterwards your Council endeavoured to realise the provisions of that compromise. In 1910, not exactly a fresh departure was made, but the boundary of this enterprise was enlarged in so far as an attempt was made to conciliate everybody; and as part of that conciliation members of the Society of Architects were to be brought into the Institute on condition that the Bill was to be a penalising Bill. These proposals were brought before the general body, and in January 1912 the general body expressed their disapproval of them, and the whole question was referred back to the Council for further consideration. With that resolution of January 1912 we began what I think is the third phase of this question. The Council of the Institute at once appointed a large and representative Committee to consider the whole question of registration, and also the best method of going forward in the matter. They also appointed a Constitutional Committee to consider what effect this or any other registration scheme would have on the constitution of the Institute, and they sent out inquiries to all the Allied Societies to ascertain their opinion on the matter. This brings us down to the present time, and to the Report and the Recommendations which you have in your hands. Now, gentlemen, I ask you to consider what is the present position, as to which you have had concise information in the Report which has been circulated with this notice. The position, shortly, is this. Our expert advisers tell us that under the present circumstances there is an extremely small chance for a considerable

time of a Registration Bill being placed on the Statute Book. They also advise us that the effort to do so would involve us in very considerable expense. We also find that though some of our Allied Societies are in favour of going forward with the Registration Bill, others are against it. Therefore there is a serious division of opinion on that matter. And in the third place we meet with a serious constitutional difficulty, because it is obvious that a Registration Bill must affect all classes who are connected with the Institute. And yet one of our classes is, by the Constitution, debarred from giving any expression of opinion on this matter. We are, therefore, in regard to proceeding directly to a Registration Bill, practically in an *impasse*. Your Council have given all these factors of the question most careful and anxious consideration, and the result they have arrived at is the alternative, the second of the two courses that were suggested to you by your Registration Committee, that we should proceed by way of a New Charter. (Applause.) They think that this course will give us that differentiation between the qualified and the unqualified man, and that public recognition of our status, which have been the principal objects of all schemes for registration. I may point out further that, in the opinion of your Council, such a course as this is a necessary preliminary to any further proceedings and action, to any endeavour to promote a Registration Bill in Parliament if such action becomes necessary in the future. And, lastly, they feel that this course will, if adopted, unite all the scattered units of our profession and make it what it ought to be, a great and compact profession. (Applause.) Gentlemen, I have endeavoured to lay before you, as briefly as I can, what is the position. There are just one or two remarks that I would like to make to you in my personal capacity, not in the least as occupying the Chair which I have the honour to occupy, but simply as a member of the Institute. I have been told that my own personal attitude in this matter has been supposed to be hostile on this question. I may tell you, gentlemen, that it is nothing of the sort. (Hear, hear.) I say, in order to put a stop to any such foolish rumours, that it is nothing of the sort, because I am convinced by the logic of facts, whatever one may have thought twenty years ago, that some organisation of our calling is necessary. (Applause.) And personally I am entirely in favour of it, and I am now speaking as one of the voters in this room, as an individual member of the Institute. I am in favour of this scheme because I hope it may settle this great and burning question which is before us every year, and I hope that if we can arrive at a settlement and determine the policy which is to govern our action in this matter, it will free us for activities in other directions which are very urgently needed. (Applause.) I would say also that this Report is not to be taken in detail; it is merely a statement of a general policy; the details will, of course, have to be most carefully considered at a later stage if the general policy is adopted. That is all I have to say, except that we have a great deal to discuss, and I urge all gentlemen who will speak to-night to keep as closely to the point as they can, and not to say more than is necessary to make their point clear. (Applause.) In order formally

to introduce the discussion, I shall call upon Mr. Peach to move the adoption of the Report and Recommendations, and Mr. Gammell to second it. (Applause.)

Mr. STANLEY PEACH [P.], in formally moving the adoption of the Report and Recommendations of the Council, said: I am deputed to lay fully before the meeting the steps which the Registration Committee have taken in the course of their investigations and which ultimately caused the Council to arrive at the suggestion of policy contained in their Recommendations. The President has stated in the Opening Address of the Session that the question was intricate and difficult, and had occupied the attention of the profession for over thirty years. As a matter of fact, it went back further than that, for the necessity of conferring a "Hall Mark" upon the duly qualified man to prevent confusion in the public mind was present in the minds of those who founded the Institute. In considering the question before the Meeting it is necessary to remember that the Institute is of a dual nature. It is a club, and as a club it is competent for the members to have distinctions among themselves and to draw up rules or to make regulations for the management of the members in using the club. But it has a greater function. It is a public body empowered by the King in Council to foster and encourage Architecture, and in every action taken by the Institute its constitution and function to act in the public interest must never be lost sight of. The policy must be based on public policy. A general "Hall Mark" of Chartered Architect, if adopted, would enable the public to easily distinguish qualified architects from those who merely used the title Architect, and thus prevent misunderstandings would be removed. The opinion of the Institute has always been that the qualified architect is one who, having natural artistic ability and an instinct for construction, has developed these natural gifts to the best advantage by judicious education, and by doing so has fitted himself to be a valuable public servant. This development was part of the work which the Institute is empowered to do by Charter, and the number of men who at the present time hold a Diploma of qualification granted by the Institute is conclusive evidence that the work has been thoroughly well done. At the outset the Registration Committee found itself hampered by the mandate of the Institute given in 1906 and confirmed in 1907, namely, that Parliamentary recognition should be confined to its own membership.* That, in effect, is to ask Parliament for a monopoly which is inconsistent with the prevailing opinion of the present day, and our Parliamentary and legal advisers consider that it is impracticable. Their advice was given after careful consideration and exhaustive discussion of the subject with the Registration Committee and its delegates. The whole case of Registration submitted to our advisers was prepared by the Secretary of the Institute from its records, and this, together with the Bill of 1905 (although previously rejected by the Institute), was sent to the solicitors. It may be argued that as the question so the answer will be, but the reply in this instance is a notable exception to this general rule. The answer obviously invited was to advise the Institute to proceed with a Bill. But this was not the reply received. The difficulties were pointed out and the Committee were advised that the present was not a favourable time to promote a Bill, and that the mandate of the Institute was not suitable material upon which to frame a Bill, and that if a Bill for Registration was to be drafted it should be on a wider basis, and the Bill of

1905 was recommended as a suitable measure of this kind if brought up to date. In the face of this advice the Registration Committee might at once have reported to the Council that it was impossible to go on. They considered that this would be merely waste of time, and that it would be better to consider the Bill of 1905† with a view to eliminating features of the Bill which were considered objectionable and which had caused it to be rejected by the Institute. The Committee found it impossible to remove entirely the objectionable features, with the result that the Bill which is referred to in its Report does not differ substantially from the Bill of 1905, the terms of which are well known to all of us.‡ The solicitors recommended the Committee to consider the public case; and here again the Committee were face to face with a difficulty, because an institution which is empowered by Charter to do certain work must experience great difficulty in changing the source of its authority unless it can be shown that the power which it has is insufficient, and that the authority originally granting the authority is unable to remedy the defects. In the case of this Institute there is no evidence (as far as we have gone) that the Chartered power has been insufficient or that the further powers required in the public interest cannot be obtained by Charter. This is not merely our solicitors' advice, but it is the general opinion of those who are conversant with these matters and with Parliamentary procedure. It cannot be said that in the past the Institute has failed to make the best use of the powers entrusted to it, when we remember that in or about the year 1884 the Institute had only about 1,000 members, and that to-day, if we include members of Allied Societies, there are some 7,000 members of the profession more or less under its control. The majority of these men have been examined by the Institute and found qualified to carry on the work of the Institute in advancing that great national asset "Architecture." We must bear in mind that an architect is not only an artist, a designer, and a scientific man giving service for a reward to an individual. He acts also as a winnowing machine, and in the course of his practice separates the wheat from the chaff throughout the wide field of industrial and commercial activity concerned with the Building Trade throughout this country. There is conclusive evidence in the cottage, in the school, in the factory, and in all the public and private buildings of the United Kingdom that the members of the Institute deemed qualified by the Institute have efficiently performed this work in the service of the public, and that all classes of the public have derived substantial benefits from their work. It is to the public interest that the "Hall Mark" of the men who are competent to make selection in this way should be perfectly clear, otherwise there will be confusion in the public mind and the work will suffer by falling to a great extent into unqualified hands. Probably artists will always have distinctions among themselves, but these domestic distinctions should not be allowed to interfere with the general "Hall Mark" which is required for the guidance of the public. Unless it is perfectly clear to the public, the principal advantage of Registration is missed. In the performance of its public duty it is possible that individual members may at times suffer, but that is almost inevitable in any great public work for public benefit.

† For Draft Bill 1905 see JOURNAL 22nd July 1905, page 585.

‡ The objectionable features are mentioned in the Report of the Registration Committee printed in the JOURNAL 9th March 1907.

* See JOURNAL R.I.B.A. 7th April 1906 and 9th March 1907.

It is not a real hardship in the end, because if the cause is great and of sufficient importance to justify exceptional treatment of practitioners, and our efforts are directed to advance the work itself, it will act like a magnet, and as the cause advances in public estimation it will assist the members far more than anything which can be done for members as individuals. In considering the Report and Recommendations we should therefore concentrate upon the public point of view. In such a case we need not be too modest. I think we are entitled to say that the work of the architect of to-day, by reason of the work which this Institute has done under the powers conferred upon it by the King, will compare favourably with the work of any architects of the past. This is largely due, in the first instance, to the "Hall Mark" conferred by the Institute under the Charter of 1837, which recognised the "Members" of the Institute, and it was this distinction then conferred which first enabled the public to distinguish clearly between the qualified and the unqualified practitioners. So far as the public are concerned one "Hall Mark" to all is the ideal system of Registration, and I do not think that we shall ever improve upon it. The members of the Institute were, it is true, divided among themselves into Fellows and Associates, but to the public they were all members alike. About the middle of last century the distinction between Fellows and Associates was gradually emphasised in the eyes of the world, and the public advantage of a simple and unmistakable "Hall Mark" was lost sight of. There is abundant evidence to show that by reason of this division of our membership the public were confused and the cause of Architecture suffered. It is well known that the older man claimed that he was the superior by reason of his age and experience, and the younger man claimed that he was the superior because the older man had obtained his diploma by mere effluxion of time, while he, the younger man, had obtained his as the result of the better use which he had made of his time. These statements were made for self-preservation, and were the inevitable and the direct outcome of the undesirable distinctions which had been introduced into our ranks. In spite of our experience later on we made a third distinction by the creation of the Licentiate class, and imposed even more severe restrictions on that class than the Associates had to endure when their class was first formed. The disabilities of the Associates have been gradually removed by continuous agitation, and not from a sense of justice, as they should have been. It would have been far more dignified and better for the profession to have given way from the highest motives instead of in the end yielding to force that which was justified by reason. The Recommendations of the Council are directed to avoid repetition of these mistakes and to prevent discord in our ranks. You are asked to-day to grant the Licentiates that which in the end the Institute was compelled to concede to the Associates, but to a far less extent. Over 2,000 men have been drawn into this Institute as Licentiates, and have been placed under permanent disabilities. They are unable to express any opinion or to vote upon matters which vitally affect the means whereby they earn their daily bread and which affect their professional reputation and status. The Council desire to give them reasonable means of having at least a voice in these matters, and also to remove the last of the disabilities attached to the Associates; and if there is any real hardship in these proposals it falls on the Fellows rather than the Associates. The Fellows are asked to deal generously with the Associates, and the Fellows and Associates to extend a like generous treatment to the Licentiates. The Council believe

that there is a desire for further information on this subject, but in the Report which is before you everything which is really pertinent to the issue is stated. The condensed statement of the facts which appears in the Report will necessarily be amplified as the details are discussed, and members will find that we are really face to face with a choice between proceeding on the lines recommended by the Council, or altering the principles which up to the present time have governed the policy of this Institute. They must go further than the Institute has hitherto shown itself willing to go. That is the issue which is before us, and upon which we shall have to express an opinion to-night. I beg to propose the adoption of the Report and Recommendations, and to ask Mr. Gammell to second it.

MR. K. GAMMELL [J.]: Mr. President and Fellow Members,—You have listened to the speech of the gentleman who has moved the adoption of these proposals, and I believe I shall have the concurrence of everyone in this room when I offer the opinion that to be called upon to follow such a speaker is in the nature of a thankless task. That being so, my feelings are distinctly of a mixed nature. I am, of course, grateful to Mr. Peach for saving me from the responsibility of amplifying the statement issued by the Council with regard to these proposals, but, on the other hand, I feel that I owe him no thanks, because, so far as my limited intelligence permits me to see, he has placed me in a position bordering dangerously upon the superfluous. As I apprehend it, the duties of a seconder to any resolution are, to put it in metaphor, to gather up the loose ends of the warp and woof of his remarks; in order that it may be presented to the meeting as a complete garment, with the eventual idea of its being torn to pieces by the meeting in order to test the genuineness and the value of the materials which compose it. That, I think, is the right conception of the duties of a seconder. By reason of the thoroughness of Mr. Peach's remarks, that is not possible for me to do, because, honestly, I can think of nothing to add in the way of new matter, or which can be claimed to break new ground. And it would seem to me that the only claim I have on the attention of this meeting is if I can advance anything which I think will be helpful to the meeting to enable it to approach the consideration of the matter in the proper way. I believe, gentlemen, that I can, and that being so, with your concurrence I want to put one or two points before you as representing the particular reasons why you should give these proposals your very careful consideration, and, I hope, your eventual concurrence, if not to-night, then on some future occasion. In jotting down these notes I should like to explain that I have not placed them in what I regard as any order of merit or value. It must be obvious to the meeting that a newly joined, or recently joined, Associate could not approach this matter in quite the same way as a Fellow, but I hope the consensus of opinion in this room, either to-night or on some future occasion, will be in favour of the acceptance of these proposals, and I also go further and offer the opinion that the only proper way to regard these proposals is not from the personal point of view, but with the largest possible outlook. (Hear, hear.) What is this going to do for our Institute, which we have all worked for, and which we all respect and—I shall use a term which I hope you will not object to—love? I hope that will not be misinterpreted. I love this Institute. I have put up a good fight on many occasions, and I hope to do so again, and what I want members to do, if they will forgive me for taking up the attitude of the heavy father, is to look at it and see what advan-

rage your sons, and, I hope, my son, will derive if we make the sacrifices which we are asked for to-night. There is no doubt we are asked to make sacrifices, and the question is, Are we prepared to make them? The first point I have in my notes deals with one certain matter, as to why I think these proposals are worthy of very careful consideration; and that is because you know these emanate from the most absolutely out-and-out Registrationist Council which members have ever voted into a position of power and responsibility. I do not say it is absolutely out-and-out Registrationist, but I can say without fear of contradiction that at least 75 per cent. of the members who form your Council now and your Constitutional Body are Registrationists. I venture to think that is a point which should be carefully and clearly borne in mind. Secondly, they represent no sudden resolve of a newly-elected Council or Committee, anxious, to use an American expression, to "make good." Two years have gone by before you have had this matter to consider, and therefore I want you to recollect that this is no sudden panic, no death-bed repentance, but that these proposals have been laid before you because they have been most carefully, thoroughly, and conscientiously thought out. Also I might add that the members forming these Committees and your Council have never been in the slightest doubt why they were sent there to represent you. That is a side-issue, but one which I think you should remember. Thirdly, despite the fact that these proposals are aimed at eventual registration, yet they are of such a nature as to commend themselves to those who hitherto have in Committee and in Council been opposed to our views. That, I think, is a very important point, because, setting aside for the moment the question of the Licentiate class, it is evident that if we are some day to secure registration, we must, so far as lies to our hands, do away with all this opposition. By these proposals, recollect, you have brought into line men who have hitherto kept studiously aloof from us, and who have even been a source of dissension within the Institute and Council. My fourth point is that the proposals offer the only means whereby any Bill promotable by the Institute can hope to be successful in Parliament. To make that statement clear, it is necessary to say this: It does not matter a rap how broad your Bill may be, if you cannot go to Parliament and say that it is promoted by an Institute every member of which has the opportunity, if he so desires, of making his voice or his opinions felt in general meeting. I believe I am within my right in saying that such a Bill is doomed to absolute failure. (Hear, hear.) I want you to get these points into your heads, because they are the points which we have thought over *ad nauseam*, if I may be permitted the expression. And now I shall divulge a State secret when I say that I, and many others with me, fought this idea of holding out privileges to the Licentiate class to the last ditch. I was at one of the Committees when they were discussing this, and it was only when we were, figuratively speaking, beaten to our knees that we at last gave in. But having given in, I for one am perfectly satisfied with these proposals; I think they offer the only possible solution at the present moment, and I shall not go back on that opinion. It is no use debating the matter with regard to the Licentiate class. You must recollect that the Licentiate class were brought in for a specific purpose. Certain inducements were held out for them to come in, and by reason of that they naturally look to our Council and this Institute to do something to bear out their promise with regard to themselves, which was to go forward in the attempt to obtain registration. (Hear, hear.) I shall make another frank admission—though

I am afraid our President will not thank me for doing it. No one in this room fought the proposals for the inclusion of the Licentiate class within this Institute more whole-heartedly and more thoroughly than I did. But against my wishes they are included, and because they are included, and because I feel that the Institute owes them certain treatment, that we are obliged to bear out our promises to them if possible, I am whole-heartedly in favour of these proposals which have been laid before you this evening in the resolution which has been proposed by Mr. Peach. And that, I think, is a point which you should keep in mind, that we made certain promises and held out certain inducements to the Licentiate class, and they look to us to make good. Sixthly, I hold that these proposals are worthy of support, because they represent a distinct step forward. It is very easy, gentlemen, to offer criticism of a destructive kind, but I venture to think that the only criticism which is worth anything, and which will do our Institute the slightest good, is constructive criticism. Therefore, I would ask any gentleman who is not in agreement with these proposals, if he wishes to do his best for this Institute, that he will not destroy without setting up again. If any gentleman will bring forward a proposal to get over this difficulty better than the one which has been placed before you, I shall join issue, provided that I am satisfied that it is a tangible, a real, and a practicable suggestion. But after two years of some of the hardest work I have ever put into a Committee, I say that I do not think such a suggestion will be forthcoming. Should it be forthcoming, I will make good my statement. The last point I want to ask the careful consideration of this Institute to is this: Whether to-night you vote down this proposal, or whether this meeting be adjourned, or whether on some future occasion this proposal is voted down or is accepted, one fact will remain. If you vote it down, you will at any rate suggest, if you do not go to prove, that there is a distinct disinclination on the part of members to make sacrifices; and that being the case, I venture to offer the humble opinion that if we are not as a body prepared to make sacrifices, registration is absolutely impossible of attainment, and because I honestly think that, and because I honestly believe that this is the very best possible solution of the present difficulty, I am going to ask every one of my fellow Associates in this room to vote for the proposal when the opportunity arises. (Applause.)

Mr. S. DOUGLAS TORLEY [A.]: I desire to move the following amendment:—

"That in the opinion of this meeting of the R.I.B.A., it is undesirable to come to any decision in regard to the Report and Recommendations of the Council without further information; and in order to arrive at some definite policy in regard to future action, a further meeting should be called before the end of January next for the purposes suggested by the Registration Committee in Clause 5 of the Report of the 28th March 1913, and that with the notice of that meeting every member should receive from the offices of the Institute:

- (a) A copy of the Bill as revised.
- (b) Copies of the reports of the Solicitors and Parliamentary Agents, and
- (c) Copies of the whole of the documentary evidence upon which these reports were based."

It might be an easier way to attempt to justify this resolution if I were to make one or two comments on the recommendation as it stands before us. Mr. Gammell has asked us to make our criticisms constructive rather than destructive. All will agree with him in that, but it must be borne in mind that the Institute has applied to

the Privy Council recently—four years ago only—for a New Charter, and I think that in criticising this we are entitled to ask those who recommend a New Charter to justify the result of what can be obtained. I would offer one or two criticisms on those lines, and in doing so I remind the meeting that I am only able to make those criticisms in the light of the information before us; it is possible that when further information is forthcoming, as I hope it will be before we come to a decision, it may be desirable to alter those opinions, and, if so, I shall do so without any sense of shame, even if it means reversing them altogether. I remind you that with the Report of the Registration Committee a draft Bill was submitted to the Council, and with that draft Bill the opinion that it went far beyond the policy laid down by the Institute in 1907, that it was not supported unanimously in Committee, would probably receive considerable opposition from the General Body, and there was very little chance of its becoming law in the future. Therefore the matter was referred to the Constitutional Committee, and, now, the Council bring forward an alternative policy—viz. to apply to the Privy Council for a New Charter. I draw attention to this point, that whereas the Committee recommend an application to the Privy Council for a New Charter as a substitute for registration, or as they say an alternative, yet, as far as I understand the Council's Report, they put it forward as a step towards registration. Now there is a wide difference between those two positions, and it is worth noting at the outset. (Hear, hear.) The proposal for a New Charter is put forward with the view of obtaining three distinct advantages: First, to secure for all qualified architects a public recognition of their qualification; secondly, to give them some substantial benefits; and thirdly, to remove the obstacles to further Parliamentary action. In the first place, with regard to the public recognition that is to be secured, I am reluctant to criticise any proposition the Council make; during the short time I have been a member I think I have shown my desire to meet the Council and support them wherever possible. But this proposal, to obtain the exclusive right to the term "Chartered Architect," will not secure recognition by the public. Fellows of the Surveyors' Institution who have the right to call themselves Chartered Surveyors with the same object are found not to do so, except in very few numbers. And I understand that those who do use the term find that even their own professional colleagues are unaware of what it means. (Laughter.) If I understand the position of the registrationists correctly, they do not claim that qualified architects should be recognised, but that unqualified architects should not be created in future. But that will not be secured by using the term "Chartered Architect," and if that is the only reason for approaching the Privy Council, I think it is a mistake to trouble the Privy Council in the matter. There is the question of substantial advantages. The benefits, I gather, are referred to in Clause 8, in which we are told "That the Royal Institute be empowered, subject to the approval of the Privy Council, to issue a scale of fees payable to Chartered Architects." I do not know whether fees based on such a scale would be recoverable at law, but even so it follows that the substantial character of the benefit depends on the scale. (Laughter.) I wish to hurry over the point because it is rather a sore one at present. During recent months we have held two meetings with the object of raising this scale, and not a sufficient number of members have attended to form a quorum. That does not seem a sufficient reason to approach the Privy Council. With regard to removing the obstacles, Clause 5

proposes to remove the disability imposed by previous Charters and By-laws on Associate members, and that all Chartered Architects by obtaining Associate rank of the Institute be permitted to vote on all matters connected with the management of the Institute, including the Charters and the By-laws. This would have some disadvantage as well as advantages, but on the whole there is no objection from my point of view as an Associate. But at the same time I do not think it is a matter which is of extreme importance at the present moment. Will you let me point out, with all respect to the Council, that if this is an obstacle, as we are advised it is by the Solicitors, the proper time to have removed it was in 1909, when the disabilities were precisely the same, and we were before the Privy Council and might have got a clause then without much trouble. (Hear, hear.) With regard to removing the disabilities on Licentiates, I do not know how far I shall be carrying the meeting with me, but the term "disability" in reference to Licentiates is singularly inappropriate. It seems to suggest they are a class who, but for some restrictive conditions in our Charter and By-laws, would be entitled to the full benefit of membership. That is not the case. In the Charter of 1909 the position of the Licentiate is stated clearly. On page 37 of the KALENDAR the Charter says: "A Licentiate shall not be a corporate member of the Royal Institute." That is an unfortunate position for Licentiates, of whom I desire to speak in terms of studied respect. But the Licentiate can overcome such disability, and he will be welcomed as a member of the Institute with open arms whenever he cares to avail himself of the opportunity which is presented to him twice a year of becoming fully qualified. (Loud applause.) Meantime the dignity and prestige of this Institute must be maintained, and the proper men to maintain it are those who have given some proof of their desire to take part in and further its objects by submitting to an examination. (Applause.) In becoming members of this Institute we undertook with open eyes certain definite responsibilities, and as responsible members of this Institute—and in this connection I see no reason to differentiate between the Fellows and the Associates—we did so knowing quite well that it would be a question of give all along the line and not take. We are willing and anxious to promote the objects of the Institute, and we are willing, as has been already suggested to us by Mr. Peach in moving the resolution—we are willing to make considerable sacrifices. But this is not altogether a question of the feeling between Licentiates and Associates. There is the position of the Institute to be considered, and I say we should not be loyal to this Institute in running away from our responsibilities to the extent of sharing them with men who would not associate themselves with us until the bar of an examination was withdrawn. Believe me, I am not speaking as an Associate who resents the ascendancy of the Licentiates—no one has ever heard me rant on that point, and never will—but we members who have the Institute's interests at heart should not, for the sake of registration or anything else, hand over any part of the control of the destinies of the Institute to those who would not join us two years ago when we stood in need of an increased membership unless we went out and carried them in. For those distinctive reasons, I am sorry to say I am opposed to the proposition before us; but, in the light of further information, I shall be glad to reconsider this, and I shall be glad, if I find I am wrong, to come here on a future occasion and affirm before you all that I have been talking nonsense this evening and have reconsidered my position. I know

I speak for others around me who occupy the same position, and who also want to do the right thing by the Institute in this matter. And I am willing to follow the Council and to support the Council in its recommendations up to a point. But I will not move in the dark. I want some light, and the light I ask for is contained in my amendment. One more point. If I am altogether wrong, and the meeting believes it will be advisable to go forward at once and obtain a New Charter, what will be the position? If we got a New Charter and remove obstacles which are in the way, we are at once up against Sections A and B, Clause 1, Appendix A—viz. that the principles of registration are not suitable material on which to frame a Bill. Please notice that this does not say that the position created by the Institute at the present moment has set up matters which prevent registration; it definitely says that in the judgment of the solicitors the established principles of registration are not suitable material on which to frame a Bill, and, further, if framed no public case can be made out in justification. Well, gentlemen, if the entire legal fraternity were to attend our meeting, and were to rise as one man and solemnly affirm that the established principles of registration are not suitable material on which to frame a Bill, as an artist and a citizen I should say they were all wrong, and I know that the principles of registration are proper material on which to frame a Bill. As to how they are to be framed, solicitors' opinion may be of some value, but when the solicitors tell us it is not proper material, I want to know what the Registration Committee have been telling our solicitors. And I submit it is essential we should have that information before coming to a conclusion on this matter. As I said before, we are most anxious—I am speaking for others as well as myself—to do the right thing by the Institute. We are not opposing this policy. I have offered some criticism on points which I wanted to bring forward, but we are not opposed to this proposition. We do want to have information which, as sane men, we can consider ourselves, to find out what it is that the Council adopts solicitors' advice upon with the view of taking future Parliamentary action which in Clauses A and B the same solicitors say will be entirely useless. I may be faulty in my reasoning—I think I must be (laughter)—but Mr. Peach, in his opening remarks, said, I think, that we had in this document all that was essential to the proper understanding of the question. They are not actually his words perhaps, but that is what he meant. With due respect to Mr. Peach, we have not. (Hear, hear.) And therefore I want every member to be supplied with the information mentioned in the amendment. (Hear, hear.) Several interesting items might well be included in this Report which are not included in it, and which have been given to us this evening in the speeches. But only those in this room have received that information. As we stand at the parting of the ways with regard to this Institute—because if this New Charter is formed we shall start on an entirely new basis for the future—I say as we stand at the parting of the ways I think every member of the Institute, whether he is likely to be interested in the matter or not, should have sufficient information on which to arrive at a proper conclusion. We shall probably be told it will be costly. I know it will be costly, but it will not be so costly as making a mistake. If that information is supplied to us, and a further meeting is held as soon as convenient, we shall be able to come to that meeting prepared to express an opinion on this matter in the light of the whole information on which such an opinion should be based.

Therefore, gentlemen, I beg to move the amendment which I have read out to you. (Loud applause.)

MR. HERBERT A. WELCH (J.): In seconding the amendment proposed by Mr. Topley I shall endeavour, as suggested by the President, to occupy as little of the time at the disposal of this meeting as possible. In speaking to the amendment, I shall neither applaud nor attack the Report, for it is clear that I must refrain from dealing with the subject of registration as such, except in so far as might be necessary to give effect to or emphasise any point that I feel is in need of emphasis—and here, Mr. President, I will ask you to bear with me if my remarks are not strictly within the purview of the resolution. There are many of us present here this evening—exactly how many will not be revealed until we vote—who feel that the time has arrived when some definite course must be decided upon and pursued in this matter of registration. There is, I think, also one thing at least upon which we are all agreed, and that is that the best interests of the Institute—with which, of course, is intimately connected the profession generally—lie very near our hearts. We, therefore, should be most anxious that the decision to be arrived at in connection with the Report will be one which is the result of the most careful consideration and deliberation on our parts. We are anxious, too, that this decision shall be both satisfactory and lasting. I should personally deplore that there might occur hereafter on this question the least cause for conflict within our ranks. I, therefore, ask the consideration of the members assembled here to-night for the amendment that I have the honour and pleasure to second. I submit that in order to arrive at a satisfactory and lasting decision on this question the time at our disposal to-night is inadequate. We should have all the evidence and documents before us for mature and deliberate consideration. This view I think you will find justified by the replies from the Councils of the Allied Societies given us on page 5. Let us consider them briefly in passing. We find that this subject is of such importance that the Societies' views are divided as follows: For the Council's proposals, 5; for the Registration Bill, 6. As I read it, two Societies are doubtful, and no less than five Societies have not yet completed their consideration of the Report. Now, Sir, these Societies have had the Report for consideration since April of this year. I assume that the Report of the Council, which we have before us, was in the printer's hands early in November, which would give the Societies six or seven months to arrive at a decision, and yet in five cases this has been found to be inadequate. Now, if this length of time has been inadequate for them to arrive at a satisfactory decision, how much more so is this the case with the members here to-night, who have but an hour or two at their disposal.

THE PRESIDENT: We have since had two further communications, one from the Sheffield Society of Architects, saying that "under the circumstances mentioned in the Interim Report of the Registration Committee it is not desirable to proceed further with a Registration Bill at the present time." The other from the Northern Architectural Association, which says: "This Council is of opinion that a Registration Bill is necessary. In view, however, of the difficulties of obtaining the Bill as explained in the Report of the Registration Committee, the Council agrees that an application be made to the Privy Council for a new Charter. The Council are further of opinion that the granting of a new Charter should be only the preliminary to the active promotion of a Registration Bill."

MR. WELCH, continuing: We look upon the Council as desirous of carrying out the wishes of the members, and their actions have hitherto justified our arriving

at this decision. I am sure that you have no desire to march onward without the whole-hearted support of the great majority of the members of the Institute. Believing this, as I do most sincerely believe it, I ask you to vote in favour of the amendment, which in substance means the postponement of this meeting for about two months, and which has for its purpose the more lengthy consideration of these proposals, in order that we might vote clearly and deliberately upon an issue of grave importance; and, since unity is strength, it will thereby enable us to give to you, Sir, and your colleagues a reply which will at once show clearly the road that it is thought best to follow, and I hope and trust that by voting in favour of the amendment it might have the result of procuring a united Institute at present fettered and weakened by dissensions within its ranks.

Mr. C. H. BRODIE [F.]: I take it for granted that there is no intention of forcing a decision on this matter to-night.

THE PRESIDENT: No; we are anxious to have it thoroughly discussed by all members of the Institute.

Mr. BRODIE: The remarks of the last gentleman seem to have very little bearing on the point.

THE PRESIDENT: I would not say that; but the Council have been extremely anxious to have all the cards on the table, and there is no desire to withhold any information. All that is desired will be forthcoming.

Mr. EDWIN T. HALL [F.]: I am sure we ought all to congratulate Mr. Peach and Mr. Gammell for the excellent speeches they have made in support of the proposition before us. They were on a high plane, and I feel it is the desire of every member at this meeting that we should look primarily to the advancement of architecture in anything we undertake or do. I do not propose to question the wisdom of the Council in proposing that an intermediate step should be taken with reference to the ultimate appeal to Parliament; I am not even prepared to say whether an appeal to Parliament is wise or unwise. But the Institute has at present decided that there shall be an ultimate appeal to Parliament, and this step, I understand, is a step taken with a view to that end. I should like to make this observation with regard to it: that one of the reasons given for this is, that the Licentiates are unable to express their opinion on this subject. I venture, with the greatest respect, to say that that is not accurate. The Licentiates have the right to the use of the Institute premises, they could always summon a meeting, and they could come to a resolution in favour of any policy which the Council might determine, or the reverse. Passing from that, I have not the remotest intention of opposing the proposals which the Council have laid before you; they have the responsibility, they have the wisdom, and they have had the facts before them; and they have come with a very considered judgment before you. But I do think it is desirable that we should see where these proposals will carry us. First of all, I want to clear the confusion of thought which is in the Registration Report before us. In several places it speaks of Licentiates as members of this Institute. I want to make it clear that they are not. The members of this Institute are the Fellows, the Associates, the Honorary Associates, the Honorary Fellows, and the Honorary Corresponding Members; those are the members of the Institute. If you refer to the Charter of 1909 you will see that the Licentiates are not members of the Institute at all. The Charter says: "A Licentiate shall not be a corporate member of the Royal Institute, nor shall he have any interest in or claim against the property of the Institute." The scheme before us is a scheme under various heads. It is, first, to give the title "Chartered Architect."

I want to draw the Council's attention to those who are excluded from the privileges of being called "Chartered Architect," if that is a privilege: it excludes all members of the Royal Academies of England, Ireland, Scotland and Wales. That, I think, is a grave omission. If the architects are to be embodied, we must incorporate the members of those distinguished Societies. It also excludes all members of the Society of Architects. I am not holding a brief—and I do not suppose there is anybody in this room who will think I do—for the Society of Architects. It also excludes all non-members of any societies who are practising as architects in this kingdom. I think those are very grave omissions, which should be remedied when the proposals come up. Resolution No. 2 is to give to Honorary Fellows, Hon. Associates, and Hon. Corresponding Members representation on the Council and Committees. That is an entirely new departure, and, I venture to think, a very dangerous one. These gentlemen are Royal Dukes, distinguished men of all sorts; they are not men who, from the nature of their position, should have any control whatever over the Institute. No. 3 is to make the Council the educational and examining body for all Chartered Architects in and out of the Institute. I think the Privy Council has no power to give a Charter to this Institute to control anybody who is not a member of this Institute; that can only be done by Act of Parliament. You will remember that it is proposed that there shall be a compulsory authority. Nothing but an Act of Parliament can give compulsory authority over any citizen who is not a member of the Institute. No. 5 is to remove all the disabilities of Associates. With respect to that, I only wish to say that this question was very thoroughly thrashed out in 1907. Whether or not the Associates should have the power to vote on certain questions is not the matter strictly before us. I am not opposing it, but I do wish to say that this was very carefully thrashed out so short a time ago as 1907. It was spoken against by Sir Aston Webb and many other members, and it was decided not. I am not saying the time may not now have come when that should be altered. With regard to the practical proposition that there should be more Associates on the Council, I would point out that that can be secured by bye-law; there is no necessity to get a Charter to increase the number of Associates on the Council. The gravest matter of all is that which is to remove all the disabilities of Licentiates. I have previously quoted the Charter. The disabilities of the Licentiates are, first, that they are not Corporate Members of the Royal Institute. The first thing, therefore, you are going to do is to remove that disability, and make them Corporate Members of the Royal Institute. ("No.")

THE PRESIDENT: To a very limited extent.

Mr. HALL: There are two propositions; first, to remove all the disabilities of the Licentiates, and second, that they are to be represented by one in ten.

THE PRESIDENT: That is very important.

Mr. HALL: The first is in the Report, and therefore I must deal with it. There is a second proposition which is contrary to that, and that is, that there shall be a one-in-ten election. The first proposition makes them Corporate Members of the Institute; it cannot do anything else. I want to say this, simply in order that we may clear the air, that we may see where it leads us. In the first place, it is a reversal of the educational policy of the Institute, in which you, Sir, have taken so prominent a part. It was decided, first of all, that no Associates should be admitted here except by examination. It was then decided that no Fellow should be elected except from that class, with the few exceptions

of distinguished men; and after 1913, this very year, no one should come into the Institute to Associate rank unless he had gone through a certain curriculum which is laid down here. It may be right or it may be wrong; but the fact remains that if these 2,100 gentlemen are made Corporate Members of this Institute, that policy is broken down at once in the very year when it was to have been tightened up. I want to draw your attention to this very grave change; it is a reversal of the policy which has been for twenty-five years earnestly pursued in this Institute. These 2,100 gentlemen have not complied with the educational tests which have been laid down. I was the author of the Licentiate class, and for years I proposed and urged it, and therefore nothing I say will be in the least degree disrespectful to it. But remember that the Associates very strongly opposed the creation of this class of Licentiates, because, they said, "If they once get in they will swamp us." I was a Vice-President, and I was in the chair, and with the authority of the Council I made this statement, that they were not to be Corporate Members of the Institute, and therefore they never could acquire the right to vote. That statement was made with the authority of the Council only four years ago. (Loud applause.) Now, Sir, if they are admitted, just consider the position. They are 2,100 strong; they could and would, in representing their interests, control the whole Institute; there is no class to compare with them; they number nearly as many as Associates and Fellows combined; there are 1,621 Associates, 851 Fellows—these figures are taken from the present Calendar—and 2,079 Licentiates.

THE PRESIDENT: You know the voting capacity of the Licentiate class.

MR. HALL: I am talking about their disabilities. If I were a Licentiate I should acquiesce in the proposals of the Council, notwithstanding the second proposal of the Council that only one Licentiate in ten should have the right of voting. If they are Corporate Members of this Institute, this is a mere fancy franchise, which could be got rid of immediately by appeal from the Licentiate class to the Privy Council. They would be nearly as numerous as the majority of the Institute; they would say to the Privy Council that it is wrong to restrict them to a voting power of one in ten, and the Privy Council would be compelled to listen to them, and would give them the right to vote. It is a very dangerous innovation. Again, Licentiates are to go on the Council. Unless they are made Corporate Members that is contrary to the principle of the whole of our Charters, which is that none but Fellows and Associates shall sit on the Council. It may be right that you should say, "No, we will extend that and create a new class and let them sit on the Council," but it involves their being Corporate Members to do it, and the principle which I have mentioned will have disappeared. Even in the case of Allied Societies it is an essential condition to their Presidents sitting on our Council that they shall be Fellows of the Institute, and it is only in the case of the Architectural Association that an Associate may sit on the Council as a representative of an outside body. We have been invited to give constructive criticism. I would venture to do so. If you wish that the Licentiates shall be brought into the Institute in the limited way in which I understand by the second proposal it is desired, we should follow the precedent set by the Royal College of Surgeons. They had outside members, and they decided to elect, in the course of one year, first 250, and in about eight or nine years afterwards they decided to elect all outside, the qualification being that they should have been in practice for fifteen years. That is a pre-

cedent which could be adopted here. Decide that a class shall be created which shall give a certain number of them, one in ten if you please, corporate rights in the Institute. The only danger you have then is that you are excluding the other members, and that is a grave difficulty. I do not want to oppose the general scheme, but I say that in view of the fact that Associates were persuaded to agree to this class because they were given the absolute assurance that the Licentiates should not have votes, you want to consider that very carefully before you pass this proposal. It may be in the wisdom of this Institute that this prohibition should be abrogated, but if it is, it should be frankly done by saying we withdraw the previous prohibition, and we think the time has come when these men should be introduced. (Applause.)

SIR ASTON WEBB, R.A., *Past President*: I have taken part in many of the debates on this subject for about twenty-five years, I think; and so I could not help coming down to-night to join in what will probably be the last that I shall take part in. ("No, no.") What I feel is that to-night this question has been fairly debated on both sides, and I think we shall agree that what has been said against the Council's proposals has been said kindly and sincerely, and has been put before us in a clear and lucid way. The last time this subject came before us, two years ago, I unfortunately found myself opposed to what the Council proposed. (Hear, hear.) This time I confess I find myself in favour of their proposals, and I would ask the meeting to try and put aside the small details which Mr. Hall, for instance, with his extraordinary ability for analysing a report of this sort, has brought before us. I ask you to try and think of the main points in the Report. The whole thing is this: We have been asked to prepare if possible a scheme for the registration of architects, and that is what we know a large number of us wish to see, that architects should be registered by Parliament, and that nobody else except those who are so registered should be allowed to practise architecture or to call themselves architects. As far as I understand it—I have not the honour of being on the Council, but I have been on this Committee—the Council were prepared to advocate a Bill on those lines if it was possible. But in the first instance they very properly went to their legal advisers, not only to their Solicitors but to Parliamentary Counsel, and, as far as I understand it, Parliamentary Counsel did not say a Bill could not be framed—I think they were quite anxious—(laughter)—they gave me that impression—to frame one—and would have done so with pleasure; but when we pressed them as to the chances of that Bill they frankly said that at the present time it had no chance at all; with business as it is in the House of Commons, a private Bill of that sort would have no chance at all. (Hear, hear.) The most they could say was that if things altered it might have a "sporting chance." That is all that we could get out of them, out of gentlemen who, as I say, were extremely willing to propose the Bill. Then we considered whether it was worth while to go on, or whether we should try and take some intermediate step which would give, to some extent at any rate, what architects all over the country undoubtedly wanted. Had we not better try to obtain a step forward instead of waiting for this will-o'-the-wisp which we are told by those most anxious to forward it that there is no possible chance at the present time to get it? And I do hope that architects all over the country will realise that in the opinion of those who are best able to judge there is no reasonable possibility at the moment of getting Parliamentary sanction to what you want. And

these gentlemen put it very clearly to us; they said, "Of course we understand what you want; you want to be able to practise, and you want to prevent other fellows from doing so. That is clear. But before you can do that, before you will get Parliament to agree to that, to say that you, a certain number who have passed certain examinations, shall practise, and other men shall not, you must show in a definite way what they call a public case—viz. that it is for the public good that you should practise and others should not. That is really and truly the whole of the matter." And the ordinary sensible man said, "If that is so, if we cannot do that, can't we find some other means of at any rate getting something towards what our members want?" And the Committee went through that 1905 Bill item after item, and were always met with this difficulty—that Parliament will not grant you those penalising clauses which it includes. That, of course, is the difficulty, the penalising part of it. It seems to me perfectly understandable that Parliament could not agree that we should have this power and others should not. We looked about, and tried to find what other Societies had done, and we found that the Chartered Accountants, amongst others, had got a good deal of what they wanted under Charter. And our legal people said, "Don't you think that by Charter you can practically get what you want, with little delay, whereas with the other method it is uncertain whether you can ever get it?" It has been mentioned to-night that this chartered business is of no avail. Well, I saw the other day one of the most distinguished men in the Chartered Accountants' Institute, and I asked him how they found it answer there. He said, "We have a certain number who want this Parliamentary power to prevent other men practising, but our Council do not feel the necessity for it, because we find that all the important work"—he gave me the figures—"is done by Chartered Accountants; no public company or public body would think of employing an accountant who was not a Chartered Accountant. And so it seemed to us," he said, "that this was the best thing we could do; though it would not prevent us going for complete registration at any time if we thought well." In the House of Commons there is talk of devolving work; there is to be "Home Rule all round," and the House of Commons will then have perhaps nothing to do; then we shall be able to get our Bill considered and, possibly, passed. I do not want to go into all the details of this matter; I am not enough behind the scenes in the Institute now to know the troubles that there may be behind some of these difficulties. But with regard to the Licentiate class as a whole, of course we know that if we got a Registration Bill we should have to sweep in everyone who made any pretence at practising as an architect; they would all come in and be registered architects. It is a very much smaller thing that is proposed here; we bring in our Licentiates, whom we have already brought in, to give them the right to be called architects. The Licentiate door is closed now; there will be no more coming in; it is only those who are in, and it is a comparatively small addition for the advantage which you gentlemen think would be accruing to us if we could have some distinguishing mark, such as Registered Architect, or Chartered Architect, or whatever name you like to give it; and that is the gist of the whole matter. It seems to me that our Institute would be wise to accept some proposal of this nature, and by all means have meetings to discuss such details as those which Mr. Hall has brought before us. They should be discussed and considered. But the gist of the thing is that we should go for registering the members of this Institute by Charter instead of

going to Parliament; let us do it ourselves, and I think we shall do it very much better. It is not wise to bind ourselves too much by Parliamentary Statutes. I say this is merely a step; but in the meantime, in order to do something, and to prevent these meetings year after year and doing nothing else, see if we cannot agree that the Institute shall try registering itself and its members, and so give the public some guarantee that the members of the Institute are men whom they may safely go to as appraisers in architectural matters. That is all we have to do; and I hope this meeting will not be drawn away by other methods, but that we shall try this experiment of acting for ourselves instead of going to Parliament, which, we are advised, would be hopeless.

Mr. G. A. T. MIDDLERON [A.]: May I bring this meeting back to the amendment? We have drifted from it. It is really the amendment which is in front of us, and I would draw the attention of this meeting to the fact that the amendment does not negative the original proposition; it only asks that information shall be given to us which we apparently are entitled to receive. The Report of the Registration Committee advises that this information should be given. If you look at Clause 5 you will see that it says that the members should be called together "To receive the reports of the Solicitors and Parliamentary Agent; to examine the Bill as drafted," and so on. The members ask under this amendment that the Report of the Registration Committee shall be adopted and that members shall be put in possession of all facts. (Hear, hear.) After that we may quite possibly agree to the suggestions of the Council, but it was for the members to consider whether some alternative course could be adopted. It was for them to consider first, not for the Council to go into details of an alternative course first. It may be sent back for the Council to prepare an alternative course, but the right thing this evening is to pass an amendment and for us to have a future meeting to consider the whole thing.

Mr. JOHN SLATER [F.]: I should have been quite content to remain a silent member this evening, but as you have called upon me, and as I acted at the request of the Council as Chairman of the Registration Committee, perhaps one or two words from me may not be useless. I am bound to say, looking back upon my membership of the Institute for a great many years, that I have listened to the discussion to-night with a certain feeling of despondency. I had thought that there was a certain amount of *esprit de corps* among us, and that there was a large body of feeling in the Institute in favour of registration. Well, I can say most honestly that the Registration Committee which was appointed went into the matter fully; it discussed *pros* and *cons* in every way that was possible, and it was only when it was found that the difficulties of registration proper such as had been thought of by a large number of members of the Institute were so great as to be almost insuperable, that they issued that Interim Report to the Council, asking them to consider the matter and to take the opinions of the various Allied Societies as to whether we should go on with a Bill which we were told we should never get, or whether we should adopt some temporary measure which might eventually lead to registration as it is desired by a large number of members, and so get eventually what was wanted. But what have we heard to-night? We have heard that the Licentiates will be made corporate members of the Institute, and that the Associates have been told that they never would be. The proposal of the Council has been of such a nature that if it be carried the Asso-

ciates and the Fellows will be absolutely on equal terms. (Hear, hear.) There will be no distinction for a Fellow above an Associate. I cannot think so lowly of the Associates' interest in this Institute that if we admit the Licentiates into membership here they will oppose this motion on that account. I do not believe it. As Sir Aston Webb has told you, if you get registration you will have to enroll not only the Licentiates but everybody else, whatever his qualifications, whatever his non-qualifications, as an architect. (Hear, hear.) And that this proposal of the Council should be negatived simply because you are proposing to give the Licentiates now what they would certainly get under the other scheme seems to me a most retrograde movement. ("No, no.") I have no axe to grind, I am getting to a time of life when whether architects are registered or not will be very immaterial to me, but I do think that in view of the experience of the Chartered Accountants the suggestion that there will be no value in the title of Chartered Architect is not valid, and that if we get this thing through, the end of our difficulties will be in sight. Nobody wants to rush it through or to advocate it without the fullest discussion on every point. Some members present are asking for the details and particulars to enable them to judge of this proposal. The Registration Committee which was appointed by the Council had all these facts before them; but it was only because they were convinced, many of them very strongly against their will, that it would be useless to proceed on those larger lines for registration at once that they suggested to the Council this compromise which the Council have adopted. By all means adjourn this meeting, by all means let it be fully discussed—(Hear, hear)—but if you are to adopt one of the two alternatives, that is to say, whether we shall go on with the Bill or whether we shall adopt this Resolution of the Council, I have no hesitation in saying that it is in the interests of the Institute, in the interests of all architects and of the public, that we should proceed in the way that this resolution indicates, and should not at present go further. (Applause.)

Mr. W. H. SETH-SMITH [F.]: I think all who know me will admit that I have had something to do with registration, with its initiation and with its promotion, and have always been interested in the course which the movement has taken and in the proposal laid before you to-night. I have not been on this Committee, but I am profoundly impressed by the fact which has been stated to-night—namely, that that Committee is composed of 75 per cent. of convinced registrationists. A fact like that should go a long way to assure this meeting that the best proposal for advancing this interest is that put forward. Registration has been thoroughly considered, and the Council's proposal is laid before you as the best course which we can at the moment take to get a step forward. That movement, I believe, will ultimately result in our getting what we want. But anyone who watches Parliamentary procedure, and who knows the difficulties which face us—as I know, from having gone into this matter and read the first Paper upon the subject twenty-seven years ago—must share the solicitors' opinion that at the present moment it would be almost impossible, if not quite impossible, to get such a Bill as we want through Parliament. And yet I am hopeful that ultimately we shall do so. (Hear, hear.) With regard to what Mr. Hall just said, I regard those difficulties as details, and I think we can trust the Registration Committee and our Council, who are absolutely unbiased, or, I may say, almost biased in favour of this scheme, to get over such difficulties

as he referred to. What we want is a register of qualified men, and I agree with Sir Aston Webb that this Institute is the body to do it. That we laid down as the initial principle when we started this movement, that the Institute should be the sole examining body, if that is possible—(Hear, hear)—and that the Institute should be the registering body. What we want now is in some way to get as near to that ideal as we can. At present we must drop the third general principle which we laid down—namely, that every man calling himself an architect should be a registered architect. We must drop that at present owing to the Parliamentary difficulties and disabilities; but I feel that if we get this Register we shall get a great step forward, and therefore I am heartily in favour of supporting the recommendation of our Council. I do, however, share, Sir, the feelings which have led to the amendment. In looking through, considering, and criticising the proposals laid before us by this Paper to-night, I did feel that, though I trust our Council and Committee very thoroughly, I could not form an opinion properly without the draft amended Bill before me. (Hear, hear.) Also, the full solicitors' advice. (Hear, hear.) And I do think it would be a good thing to adjourn this meeting for the purpose of laying those documents before the whole body. (Applause.) I think if we can get this proposal of a further Charter through, as long as we do not thereby debar ourselves from future action in favour of a Bill, we shall get what we want. (Applause; and cries of "Vote, vote.")

Mr. LEONARD STOKES, *Past President*: I should just like to say that during the time I was honoured by being your President, we had, of course, to consider what was best to be done in this matter. Our first idea was to proceed by way of a Charter, as is now proposed by the Council, as we were told we should never get a Bill through. But we felt we had no choice, as we had the mandate of the Institute to prepare a Bill, and we had to go on with it. Further, we felt we could not get on with the Bill unless we "squared" the Society of Architects. The Institute, however, would not have the Society, and so the Bill had, of necessity, to be dropped. There is an adage which says half a loaf is better than no bread. The present proposals of the Council seem to me to be an attempt to get half a loaf, and, as Sir Aston Webb says, we shall go forward with a likelihood of success; and as there is no chance of getting a Bill at present, what is the use of bumping our heads against a brick wall? It is better to proceed by Charter and get what we can under a new Charter. When we get more powerful, and Parliament has less to do, then we may get all we want.

Mr. JAMES S. GIBSON [F.]: I did not want to intervene in this debate, because I have a vivid recollection of leading a forlorn hope almost two years ago when this subject was thrashed out. But I have every sympathy with the amendment in this sense, that we all wish the subject shall be thoroughly discussed; we do not wish any information to be withheld from members who desire to use that information for the purpose of coming to a decision. It is evident we cannot possibly come to any definite conclusion to-night. (Hear, hear.) But before we part, in addition to the fact that we must meet again and discuss it, and that we may have other information put before us, I would like to suggest, as several legal points have cropped up in this discussion—they always do crop up in a technical matter of this sort—I throw out the suggestion that it would be advisable that we should have our legal advisers here, so that any point which is debatable may

receive a decision straight away. (Applause.) We may not think we are competent or clever architects, but we are sure we are excellent lawyers—(laughter)—though I doubt my own abilities in both spheres. (Laughter.) But whatever my opinion may be worth, you are going to have it. It seems a very curious thing to me, in thinking over this subject, that practically registration was started, if I might say so, by the younger members of the profession and the influence of the provincial members. And they made out a very strong case, and for years the younger members of the profession were devoting the whole of their energies to trying to convert the older members into their way of looking at this particular subject. And now, strange to relate, in 1913 we have come round to the fact that the older members of the profession are quite wholeheartedly in favour of opening the doors of the Institute as widely as possible, and going as far as it is humanly practicable to do, for the first time, to secure a step towards registration, and the younger members are putting up the biggest fight possible to prevent it. One of the best things said by Mr. Peach is the thing we want to keep in mind. This great question is not going to be of any vital value to us who are practising to-day, and we have got to look at it from the point of view, first, what is it going to do for architecture, and, if you like, what in the future is it going to do for architects? I venture to think, if you carefully read through the Report of the Council, and very carefully consider the recommendations, you must honestly come to the conclusion that, barring some details, upon which there must be some diversity of opinion, but all of which can be reconciled by further discussion—barring these practically immaterial things, the whole of these proposals are perfectly logical steps in the direction of carrying through the whole programme of registration. (Hear, hear.) And I honestly do believe that there is no other way in which we have any hope whatever of seeing even partial realisation. If I might throw out a suggestion to the mover of the amendment, it is this: not to press the amendment for a definite postponement of this debate until a certain date for the purpose of supplying information, all of which, I am perfectly certain, is available to any member who wishes to take it, nor to throw upon the Institute the cost of printing all this matter and sending it out over the country to some 2,500 members, a very small proportion of whom can possibly come to this room and express their views. And, after all, it is only the views of members who take trouble, and put themselves to the expense of coming here, which are heard, and who have the opportunity of voting. Let those who really want this information come to the office and get it ("No, no") and study it; that is a perfectly sensible thing to do. It is not asking too much to say to them, "Come here and get the information, and don't make the Institute go to this expense and trouble in sending out a lot of stuff which will be put into the waste-paper basket." To get back to my point, instead of this amendment definitely postponing the meeting until another date, may I throw out the suggestion to the mover and seconder of the amendment that this meeting could very well express an opinion, even to-night, as to its approval of the general lines of policy laid down in this Report? It could, in addition, resolve itself into a meeting or conference to discuss details from time to time, at meetings which would be properly called and held. At such meetings the information which some are asking for could be read out by the Secretary. And I think, in addition, the legal advisers to the Institute should be here, and then we could get through the whole business.

Mr. TOPLEY: I have spent five days trying to understand this Report, and I am not going to spend five days at the Institute offices. Mr. Gibson says we should not go to the expense of sending out the information to all the members, but the meeting must realise that the Institute has reached a crisis in its career. ("True.") This is a time which justifies expenditure. I have moved this amendment after considerable thought. I think it is a sound one and leads to a proper conclusion.

Mr. JOHN BROOKE [F.]: May I suggest that it might meet the difficulty and save expense if it were understood that copies should be sent to each of the Allied Societies, with permission to use it, so that copies could be seen at headquarters?

Mr. PEACH: They have got it.

Mr. BROOKE: It was sent as private and confidential. But if it were sent as I suggest, any member in the provinces who wished to do so could see it.

Mr. BRODIE: I think it would be reasonable if half a dozen typewritten copies of this information were available for people who wished to have them. I have been shown to-night, in this room, a circular issued by a body of Associates who have been holding meetings and have evolved this resolution, and they should certainly be given a copy of this information, a comparatively inexpensive copy, without going to the extraordinary expense of sending a copy to every member of the Institute, which copy, as Mr. Gibson says, would certainly go into the waste-paper basket.

Sir ASTON WEBB: I move that this meeting be now adjourned, and I am sure that in the time which elapses between this meeting and the next, the Council will consider it, and supply all the information they consider necessary for this meeting to form a just decision upon the matter. We can then discuss the subject again after the full information is forthcoming which we leave it to the Council to provide.

Mr. HALL: If any member desires to have a copy of the information he could have it, I suppose; and then Mr. Brooke's suggestion that the Allied Societies should be allowed to use their copies for their members could be carried out, and at the next meeting we might get it through.

Mr. STOKES: A good deal of the information I suggest might be given in our Journal.

THE PRESIDENT: Instructions shall be given for that to be done in the next issue. There is no idea of withholding a scrap of information. The Council are anxious that members shall have the opportunity of discussing this matter very thoroughly.

The motion for adjournment was then put and carried.

CORRESPONDENCE.

Registration.

54 Bedford Square, W.C.: 3rd December 1913.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—I am not a Member of the Council or of the Registration Committee, but, as a result of the discussion on the 1st instant, I venture to suggest, entirely on my own responsibility, that if the Council could see its way at the next Special General Meeting to bring forward, after due notice, a revision of its proposals on the following lines, there is, it seems to me, every reason to think that the Institute would adopt it.

(1) That all Fellows, Associates, and Licentiates of the R.I.B.A.; all members of any Allied Society whom the Council of that Society shall certify are engaged in the *bona fide* practice of architecture; all members of the Society of Architects who shall be similarly certified; all architectural members of the Royal Academies of England, Scotland, Ireland, and Wales; all graduates in architecture of the United Kingdom; all other architects who have been in practice eighteen years; and all persons who, after the granting of this Charter, shall have been examined and duly passed by the Council of the R.I.B.A., shall have the exclusive right to use the distinctive title of "Chartered Architect."

(2) That the Royal Institute shall be empowered to form and maintain a register of all persons entitled to use the title of "Chartered Architect."

(3) That, subject to By-laws for the time being, the Council of the R.I.B.A. shall formulate, and from time to time alter and amend a scheme of examinations to be held to qualify for the title of "Chartered Architect," and to appoint Examiners for the conduct of such examinations; to pay the Examiners such fees as the Privy Council may approve; to fix the fees payable by candidates for such examinations, and, subject to the approval of the Privy Council, to alter such fees from time to time.

(4) That the Council of the R.I.B.A. shall be composed as follows:—

(a) The Fellows of the R.I.B.A. shall be represented by 21 Fellows;

(b) The Associates shall be represented by 10 Associates;

(c) The Licentiates shall be represented by 5 Fellows of the Institute who shall have passed to that rank by examination from the Class of Licentiates, such representatives to be annually elected by the whole body of Licentiates;

(d) The Society of Architects shall be represented by two of its members, one of whom shall be the President of that Society, and both of whom shall be Fellows of the R.I.B.A.;

(e) The Allied Societies shall be represented by their Presidents as at present;

(f) The Architectural Association shall be represented by its President, who shall be a Fellow or Associate;

(g) The four Standing Committees of the Institute shall be represented by the Chairman of each, *ex-officio*, who shall be a Fellow;

(h) The Board of Education shall be similarly represented by its Chairman, *ex-officio*.

(5) That the R.I.B.A. shall be empowered subject to the approval of the Privy Council to issue a scale of fees payable to Chartered Architects.

(6) That the R.I.B.A. shall be able and capable in law, notwithstanding the Statute of Mortmain, to receive, purchase, possess, hold and enjoy to them

and their successors a Hall and any messuages, lands, tenements or hereditaments whatsoever, the yearly value of which, including the site of the said Hall, shall not exceed the sum of £5,000 per annum.

That subject to the provisions contained in this Charter, the existing Charters shall, so far as unrepealed or varied, have full effect and validity and be confirmed accordingly.

By this scheme it will be seen that while the purview of the Institute is broadened in a manner commensurate with its greater responsibilities (a) the constitution of the Institute remains unaltered; (b) the principle that only corporate Members shall sit on its Council is maintained; (c) the Educational basis of Membership is not affected; (d) the class of Licentiates is represented by its own nominees in the management of affairs; and (e) all Societies of Architects, whose numerical strength is considerable, have a voice in the direction and control by the central Council of all matters pertaining to architecture and to architects on the Register.

I hold—and always held while I was in office—that it is the duty of the Council to endeavour to give effect to the Resolution of March 1907 in favour of applying to Parliament for Statutory Registration as soon as practicable. I believe it has tried to do so, and I note the Council has anew given its assurance that that Resolution shall in no way be prejudiced by the adoption of any present proposals, but shall be put into force at a time when Parliamentary business affords a prospect of success. That being so, it has recommended as an intermediate step the application for a new Charter; and, personally, as one who has been long and intimately connected with the progress of the Institute, I think it is wise to follow that advice, always provided that the Charter is drafted with jealous regard to the rights of all parties and with a statesmanlike outlook to the future.

Apologising for the length of this letter, I am,
Sir, your obedient servant,

EDWIN T. HALL, [F.].

London Hospital Essay Prize.

The College Board of the London Hospital offer a prize of the value of £120 for the best essay on "The Ventilation of Schools and Public Institutions." The essay, set under the will of the late Dr. John Liddle, is to be typewritten or printed, in English, and delivered at the London Hospital not later than 31st May 1914. The number and importance of original observations will be considered principal points of excellence. Full particulars may be obtained from the Dean, the London Hospital Medical College, Mile End, E.



9 CONDUIT STREET, LONDON, W., 6th December 1913.

NOTICE TO LICENTIATES.

The Council desire to call the attention of Licentiates to the fact that in their Form of Declaration they undertook to use no other affix than "*Licentiate R.I.B.A.*" after their names. Any breach of this regulation would compel the Council to put in force the penalty prescribed in By-law 24.

IAN MACALISTER, *Secretary.*

CHRONICLE

The Revised Scale of Charges.

The adjourned Special General Meeting, summoned for the 24th November to resume consideration of the draft revised Schedule of Professional Charges, met the same fate as the previously called Meeting for the same object on the 7th July last, falling through for want of the quorum required under By-law 67, viz.: "at least forty members, of whom at least twenty-one must be Fellows." The Chair was taken at 8 o'clock by Mr. Ernest Newton, A.R.A., Vice-President, but only 17 Fellows and 16 Associates having assembled by 8.30, the business could not proceed, and the Chairman, after an expression of regret to those attending for the useless trouble to which they had been put, declared the Meeting void and left the Chair.

The Council at their Meeting last Monday decided to bring the subject forward again at the Business Meeting to be held on the 12th January.

The London Main Roads and Town Planning Conference: Mr. John Burns's Suggestions.

The Conference presided over by Mr. John Burns, President of the Local Government Board, at Caxton Hall on the 25th November, arose out of the deputation from the R.I.B.A. and other bodies which, at the instance of the Institute Council, the Prime Minister received at the House of Commons last July.* Its purpose was to devise means of bringing about the necessary co-ordination in the making of main arterial roads and the framing of

town-planning schemes. The Conference was attended by representatives of all the local authorities in Greater London and of the various Societies interested. Sir Aston Webb, R.A., Mr. H. V. Lanchester, Mr. W. H. Seth-Smith, and Mr. W. R. Davidge were present as representatives of the Institute appointed by the Council. The subjoined report is extracted mainly from notes kindly furnished by Mr. W. R. Davidge.

MR. BURNS said that the object of the Conference was to arrange some method by which Greater London traffic could be better served by better roads and more spacious and dignified approaches than those we possessed at present. The subject had been dealt with in the last ten or twelve years by Commissions, Departments, the Traffic Branch of the Board of Trade, the Road Board, and the Local Authorities in a not altogether satisfactory way, acting separately and independently of each other, often ignorant of each other's plans, proposals, and desires, and at times unconsciously hostile to each other. In a general way, unity in idea ought to prevail if only as a means of saving the future from the costly and ugly blunders that isolated action in the past had bequeathed to them to-day. Roads were a costly business to make when new, and they would not cheapen as time went on. But the most extravagant thing was the widening of old roads that had been made too narrow. The chief duty of the Conference was to save the future from much of that avoidable and preventable waste. He did not think that any new Authority for town planning was necessary. His suggestion was that sectional conferences of adjoining authorities, or in groups of six, eight, or ten authorities, should be called by the Local Government Board to consider the alignment of the proposed arterial roads and to agree if possible on some skeleton scheme, for there was no need to construct the roads right away. His own opinion was that it was not so much the cash that was wanted as ideas. Foresight, in this case, was of infinitely more value than money.

SIR ASTON WEBB, who opened the discussion on behalf of the Royal Institute and other professional bodies, emphasised the urgent necessity, not necessarily for a new Authority, but for giving some Central Authority power to deal with the main arterial roads out of London, and to consider the many broader questions which were bound up with the question of the main roads. The suggested District Conferences might be all right in their way, but in the last resort there must be some power to lay down definitely the line on which any particular road should be constructed.

LORD PEEL, Chairman of the L.C.C. Improvements Committee, said that one of the difficulties was that some of the roads required for through traffic were much wider, and therefore more expensive, than was necessary for local needs, and the Local Authority of the district felt it hard that they should have to contribute to their upkeep. The main roads ought to be taken over by the Central Government.

MR. W. H. SETH-SMITH instanced the want of foresight now evidenced in the construction of many new roads, such as the Croydon relief road, and the necessity for a wider view of the subject.

ALDERMAN THOMPSON, of Richmond, said he had a mandate from fifty out of the eighty authorities of Greater London to ask that District Conferences should be called, and the Local Authorities would be glad to have the skilled help of the great Architects'

* See correspondence with Mr. Asquith and report of proceedings at the deputation, JOURNAL R.I.B.A. 26th July 1913.

and Surveyors' Societies, "if," he added, "they will give it for nothing."

"Which they will do," remarked Mr. Burns.

As the discussion proceeded, it became evident that the general opinion was that what was wanted was not a central authority, but a *centralising* authority, a representative authority composed of delegates from all the authorities being clearly too unwieldy. A suggestion was made that a board of experts would be best, that the London Traffic problem and the question of Town Planning in Greater London is one and the same thing, and that a new Government Department should be created for the work. In any case, some assurance was wanted as to the eventual completion of these through communicating roads. If Local Conferences were to be held, it was important that the Government authorities should be included in each conference.

MR. RAYMOND UNWIN emphasised the important point that the Local Conferences, when held, must not be exclusively Road Conferences, but Town Planning Conferences, and should consider the whole question, including possible open spaces, on the lines advocated by the London Society, and also the architectural effect of the whole. There was, too, the possible necessity of compulsion to make Local Authorities take steps to promote a town-planning scheme, and thus secure control over the development of their area. And there was the still further necessity of somebody who could render the decisions of the Local Conferences effective—some final power not only to provide the big ideas but to carry them into effect. A time-limit should be put on the Local Authorities, and they should, if necessary, be made to take action in the matter.

MR. BURNS, in summing up the discussion, said that if the Conference had done nothing better than to bring Ministers and permanent officials of Government Departments to be pilloried together, it had not been without considerable service. He gathered that they were agreed as to local conferences being called; that the Local Government Board should convene these conferences and should draft a general reference on the subject; that an official report of the Conference should be circulated as soon as possible; and finally that he was willing to urge the Local Authorities who had not already prepared town planning schemes to do so. He also urged that the existing central authorities should get together, pending "probable absorption of each by one another" as subsequent circumstances may determine.

Exhibition of Architectural Students' Drawings at the Royal Academy.

The drawings done in the Final Competition for the Commissioners' Scholarship in Architecture and the Henry Jarvis Travelling Studentship at the British School at Rome will be exhibited at the Royal Academy from the 19th to the 30th December inclusive. There will be a private view on the 18th December, and the Press will have access on the 17th if the hanging can be completed in time.

On the 11th and 12th December there will be on view at the Royal Academy, from 11 to 4, the premium drawings of the late James M. Whitelaw, Soane Medallist and R.I.B.A. Measured Drawings Medallist, whose promising career was cut short so tragically at Bournemouth last July.

St. Paul's Bridge Designs.

At the meeting of the Court of Common Council last week, Mr. J. R. Pakeman, Chairman of the Bridge House Estates Committee, in reply to a question as to what course the Committee proposed to adopt with reference to the architectural treatment of St. Paul's Bridge, stated that it was proposed to invite British architects to send in designs, and in the advertisements premiums would be offered of £300, £200, and £100 to the authors of the designs placed first, second, and third by Sir Wm. Emerson, who would act in conjunction with the Committee as Assessor.

Proposed Ministry of Fine Arts.

A Meeting to consider the question of the advisability of forming a Ministry of the Fine Arts was held on the 25th November at 9 Conduit Street, and was attended by Dr. David Murray, in the Chair; Sir George Frampton, R.A.; Mr. W. Reynolds Stephens, Chairman of the Imperial Arts League; Mr. W. R. Colton, R.A.; Sir Frank Short, R.A.; Mr. Arthur Hacker, R.A.; Mr. E. Guy Dawber, Hon. Sec. R.I.B.A.; Professor E. Lanteri; Mr. Solomon J. Solomon, R.A.; Mr. H. V. Lanchester [F.]; Mr. C. Stanley Peach [F.]; Mr. Wynford Dewhurst; Mr. H. W. Wills [F.]; and Mr. Henry T. Hare [F.]. After considerable discussion the following resolution was proposed and carried unanimously: "That this Committee undertakes to consider the possible lines on which a Ministry of the Fine Arts might be advantageously formed, and if a satisfactory scheme can be evolved pledges itself to do its best to bring such a scheme into operation."

Anglo-American Exposition, Shepherd's Bush, 1914.

This exhibition is to celebrate the centenary of peace and progress in the arts, sciences, and industries of the United States of America and the British Empire. The Duke of Connaught is Patron, the Duke of Teck Hon. President, and Earl Curzon, Earl Grey, Lord Rothschild, Lord Strathcona, The Lord Mayor, Mr. James Bryce, Sir Edward Poynter, and others, Vice-Presidents. A large section will be devoted to the decorative arts, including decorations and fixed furniture, paper-hangings and wall-coverings, carpets, silks, tapestries, and fabrics for upholstery and upholsterers' decorations, ceramics (pottery and porcelain), and glass (crystal and stained glass). The British Executive Committee, under the chairmanship of the Earl of Kintore, is desirous of bringing to the notice of those interested in British industries the necessity of their being adequately represented at the exhibition where the Americans are preparing to make a fine display. The Hon. Secretary of the Decorative Arts Committee is Mr. Arthur S. Jennings, Editor of *The Decorator*.

OBITUARY.

Charles Babcock, of Ithaca, N.Y., Professor Emeritus of Architecture in Cornell University, and the last surviving founder of the American Institute of Architects, who died on the 27th August last in his eighty-fifth year, had been an Hon. Corresponding Member of the Institute since 1892. Professor Babcock was a graduate of Union College, and studied architecture under Richard Upjohn. He afterwards entered into partnership with Mr. Upjohn, and married his daughter. It was in 1857 that he, with a number of other young architects in New York City, effected the organisation of the American Institute of Architects with an initial membership of thirty members. Soon afterwards he retired from practice, took orders in the Episcopal Church, and was rector of the church at Greenwood Iron Works, N.Y., from 1863 to 1871, when he was appointed to the then newly-established chair of Architecture at Cornell University. In 1896 the department of Architecture at the University was made a fully organised college, with Professor Babcock as its first dean and director. He was then approaching his seventieth year, and his physical resources beginning to fail, he retired in 1897, yielding his position to one of his own pupils. After his return to the ranks of the profession in 1871 as a teacher, the pressure of his special duties precluded his undertaking many or large commissions, but he rendered valuable service to the profession as consulting or advisory architect, and he continued to hold the position of advisory architect to the University until his death.

George Browne Post, the distinguished American architect and Past President of the American Institute of Architects, whose decease is announced at the age of seventy-six, was elected Hon. Corresponding Member R.I.B.A. in 1907. Mr. Post was educated as an engineer in the University of the City of New York, and on quitting the University in 1858 he entered the atelier of Richard Morris Hunt, which had just been established. Mr. Post's work has been classified into four principal divisions as to time and style—first, his engineering period, represented by the Pulitzer Building, Park Row, New York; secondly, his experimental period, when he built the Produce Exchange Building at Bowling Green, the old *Times* building in Park Row, &c.; thirdly, his period of development, represented by the Cornelius Vanderbilt town house, the Liberal Arts Building at the Columbian Exposition, the Park Building at Pittsburgh, &c.; and fourthly, his period of achievement, beginning perhaps with the successful competition design for the Department of Justice at Washington about fourteen years ago. He was the architect of the interesting group of buildings erected soon afterwards for the College of the City of New York. Later buildings are the New York Stock Exchange, the Mutual Benefit

Life Insurance Building, the George Washington University, the Capitol building for the State of Wisconsin, &c. Mr. Post was the author also of the fine piece of city planning for the improvements of the harbour of Newport, Rhode Island. In his later years Mr. Post had been assisted in his work by his two sons and partners, Messrs. Wm. S. Post and James Otis Post.

THE EXAMINATIONS.

[Final Examination: Testimonies of Study approved.]

The Board of Architectural Education have approved the designs submitted by the under-mentioned Students who are qualifying for the Final Examination:—

SUBJECT XI.

(a) DESIGN FOR A COUNTY CLUB.

Craske: C. W.	Adams: P. J.
Davison: W. R.	Andrew: H.
Dyson: V.	Alison: W.
Jepson: H. N.	Fyfe: J. S.
Nisbet: A.	Rose: G. A.
Brown: J. M.	Cooksey: H. T.
Clarke: J. A.	Whitehead: H. M.
Ackroyd: S. W.	

(b) DESIGN FOR A CLOCK TOWER.

Maxwell: A. E.	Binnie: W. B.
Callender: G. W.	Hooper: A. F.
Burnett: A. S.	Wallace: R. S.
Robinson: N. S.	Philp: R. H.
Silcock: A.	Jenkins: F.
Jenkins: T. T.	Addey: F. A.
Cheek: C. C.	Foote: A. A.
Robertson, Jun.: A. W.	Stoner: A. P.
Shibley: A. R.	Norris: E. B.
Eaton: G. M.	Triscott: H. S.
Wood: A. J.	Glazebrook: F. H.
Musmann: E. B.	Cole: E. R. F.
Terrell: W. E. W.	

MINUTES. III.

BUSINESS GENERAL MEETING.

At the Third General Meeting (Business) of the Session 1913-1914, held Monday 1st December 1913, at 8 p.m.—Present, Mr. Reginald Blomfield, A.R.A., President, in the Chair; 59 Fellows (including 20 Members of the Council), and 157 Associates (including 5 members of the Council)—the Minutes of the Meeting held 17th November 1913, having been published in the JOURNAL, were taken as read and signed as correct.

The Hon. Secretary announced the decease of the following Hon. Corresponding Members:—Professor Charles Babcock, of New York, elected 1892, and George Browne Post, of New York, elected 1907, and upon the motion of the Hon. Secretary it was resolved that the Meeting do record its sincere regret at the decease of these distinguished men and that a message of sympathy and condolence with the architectural profession in the United States be conveyed to the American Institute of Architects.

The Hon. Secretary announced the presentation of a

number of books to the Library [see SUPPLEMENT], and it was resolved that a cordial vote of thanks be passed to the donors.

Herbert Arthur Welch, *Associate*, attending for the first time since his election, was formally admitted by the President.

The following candidates were elected by show of hands under By-law 10:—

AS FELLOWS (12).

CROSBIE: Lawrence Stanley [A. 1907].

HARRINGTON: Harry [A. 1894].

and the following Licentiates, who had passed the qualifying Examination:—

BUTLER: Edmund (Birmingham).

CROUCH: Joseph (Birmingham).

DENING: Charles Frederick William (Bristol).

HOARE: Edward Barclay, B.A.Oxon.

RICHARDSON: Albert Edward.

RICHMOND: Ernest Tatham.

SAVAGE: Rupert (Birmingham).

THOMAS: Ernest-Montagu (Ootacamund, India).

WHEELER: Montague, M.A.Cantab.

WILSON: John (Edinburgh).

AS ASSOCIATES (32).

ADAMS: Edward [S. 1910] (Oxford).

BUDDEN: Lionel Bailey, M.A. [*Special*] (Liverpool).

CROWE: Joseph John [S. 1905].

ELLIS: T. Gordon [S. 1910] (Johannesburg).

FRASER: Henry Hubert [*Pugin Student* 1910, *Student* 1907].

GRISSELL: Francis [S. 1907].

HAMMOND: Frederick Millett [*Special*] (Bradford).

HANDS: Joseph Garnet [S. 1909].

HEBBLETHWAITE: Bernard Robinson [S. 1909].

HENDRY: Harry Duncan [S. 1909].

HILL: Joseph [S. 1909].

KAY: George Alexander [S. 1907] (Derby).

LAWSON: John Boyd [S. 1910].

LINTON: Leonard [S. 1908] (Stockton-on-Tees).

LORNE: Francis [S. 1911].

MACKENZIE: Gilbert Marshall, B.A.Cantab. [S. 1912].

MARCH: John Ewart [S. 1911] (Ayrbridge).

MAYHEW: Alfred Ernest [S. 1910].

NIMMO: William Wilson [S. 1908].

PEERLESS: Herbert Read [S. 1910].

PHILLIPS: Aubrey Wyndham [S. 1912] (Swansea).

PONDER: Claud Vincent [S. 1905].

ROGERS: John Charles [S. 1912].

RUSHWORTH: Tom Sadler [S. 1905].

SPENCER: Thomas [S. 1907].

STURGEON: Robert Victor [S. 1909] (Manchester).

TAIT: Thomas Smith [*Special*].

TEMPLE: Eric Edward [S. 1907] (Montreal, Canada).

VOELKEL: William [S. 1909] (Newcastle-on-Tyne).

WALKER: Richard, B.A.Oxon. [S. 1910].

WILKS: John [S. 1909] (South Shields).

WOOD: Herbert McGregor [S. 1908].

AS HON. ASSOCIATES (2).

ETCHELLS: Ernest Fiander; F.Phys.Soc.,

M.Math.A., A.M.I.Mech.E.

FOX: Sir Francis, J.P., M.Inst.C.E.

AS HON. FELLOW.

The Right Hon. REGINALD BALIOL BRETT,
Viscount Esher, G.C.V.O.

The Secretary announced that the following gentlemen had been reinstated as Associates of the Royal

Institute—viz. Alfred Hale (Birmingham) and Henry Edward Woodsend (Nottingham).

On the motion of the President, seconded by Mr. Wm. Woodward, Chairman of the Finance Committee, it was

RESOLVED, that pending the registration under the Land Transfer Acts of the title of the Institute to the freehold and leasehold properties now vested in the Architectural Union Company, Limited, or in the Liquidator thereof, the Council of the Institute be authorised to join with the said Liquidator or otherwise in giving to the present Mortgagees such security for the sum of £4,000 owing to them as they shall reasonably require. And on the said Liquidator transferring the said properties to the Institute, the Council be authorised to execute in favour of the present Mortgagees such Mortgage as the Council shall think fit to secure the repayment of the said sum of £4,000 with interest at the rate of 4 per cent. per annum in substitution for the said existing Mortgage.

And that the Council be authorised to execute a second charge over the said properties in favour of the Bankers of the Institute as security or part security for the Overdraft authorised by the Resolution passed and confirmed on the 13th day of March 1911 and the 27th day of March 1911.

The Business Meeting then terminated.

SPECIAL GENERAL MEETING.

At a Special General Meeting summoned by the Council under By-law 65, and held on Monday, 1st December 1913, following the Business General Meeting above recorded, and similarly constituted, the President, having briefly traced the history of the movement for the Statutory Registration of Architects, formally presented for consideration the Report and Recommendations of the Council in regard to the question.

Mr. C. Stanley Peach [F.] moved, and Mr. K. Gammell [A.] seconded, the adoption of the Report and Recommendations.

Mr. S. Douglas Topley [A.] moved and Mr. Herbert A. Welch seconded the following amendment:—

"That in the opinion of this Meeting of the R.I.B.A. it is undesirable to come to any decision in regard to the report and recommendations of the Council without further information; and, in order to arrive at some definite policy in regard to future action, a further Meeting should be called before the end of January next for the purposes suggested by the Registration Committee in Clause 5 of the Report of the 28th March 1913, and that with the notice of that Meeting every Member should receive from the offices of the Institute:

(a) A copy of the Bill as revised.

(b) Copies of the reports of the Solicitors and Parliamentary Agents, and

(c) Copies of the whole of the documentary evidence upon which these reports were based.

In the discussion which ensued the following Members took part, viz.: Messrs. Edwin T. Hall [F.], Sir Aston Webb, R.A. [F.], G. A. T. Middleton [A.], John Slater [F.], W. H. Seth-Smith [F.], Leonard Stokes [F.], James S. Gibson [F.], John Brooke [F.], and C. H. Brodie [F.].

A motion for the adjournment of the Meeting having been made by Sir Aston Webb, and the President having undertaken that Members should be furnished with all the information desired, the motion was put to the Meeting and carried. The proceedings then closed, and the Meeting separated at 10.35.



OVERSTRAND CHURCH, NORFOLK, BEFORE RESTORATION.

THE REPAIR OF ANCIENT BUILDINGS.

By W. A. FORSYTH [*P.*].

Read before the Royal Institute of British Architects, Monday, 15th December 1913.

THE repair of ancient buildings is one of the most important and one of the most difficult of the many duties which architects are called upon to undertake. The subject has claimed the attention of this Royal Institute from the early days of its incorporation, and, during the interval which has elapsed, the Council has given practical consideration from time to time to the many changes which have affected its general treatment. Recent legislation again brings the matter to our notice, and suggests that the time has arrived when further consideration should be given to what has become a national question and yet remains an unsettled problem in many of its broad principles.

In accepting the honour of the Council's invitation to lay before you some aspects of the subject I had some diffidence; as, although none could be found more enthusiastic towards the matter in hand, someone more qualified could with advantage have been chosen.

It is not proposed to review the history of the ideas and methods of preserving old buildings in this and other countries. This has but recently been undertaken in so remarkable yet comprehensive a manner by one of our members as to command the full admiration of all architects and others engaged in this important work. Mr. A. J. Davies's Prize Essay * stands as a monument to patient research and proportionate deduction. Nor is it possible to cover the whole ground of our subject in one evening.

It is not necessary to remind ourselves of the desirability of preserving works of past ages for their historic interest or æsthetic value; nor that it is imperative that we should study the methods whereby our ancestors adapted their structures to the demands of living or worship and to resist the destructive influences of the climate. That is an aspect upon which all are agreed, and it is the foundation upon which the subsequent consideration of the subject should be based.

* JOURNAL R.I.B.A., 14th and 28th June 1913.

New legislation in this country is invariably the development of old laws. The recently passed Ancient Monuments Consolidation and Amendment Act is such a measure, and, although hastened by the scares of Transatlantic exports from Britain, is a cautious advance into the domain of private ownership in national monuments. The Act permits the purchase or acceptance by the Government of an historic monument, and provides for its upkeep. When a work of national importance is in a state of neglect, and decay is threatened, a preservation order can be applied for, and, under certain conditions, put in force. The Commissioners of Works then step in and effect necessary reparation.

The Act, by Section 12, imposes penalties of fine and imprisonment on owners who deface or alter a scheduled monument without sanction. Under Section 14, anyone injuring or defacing a monument which is the subject of a Preservation Order may be fined £5, and be ordered to pay the cost of repairing any damage he has caused. By Section 18, where the erection of buildings in harmony with other buildings of artistic merit is impeded by by-laws, such by-laws may be relaxed upon certain conditions.

Advisory Boards are to be appointed for England, for Scotland, and for Wales. Upon the first, the Royal Institute of British Architects is to have representation under the terms of the Act, and we are all glad to hear that our President has been nominated to represent our views.

It cannot be contended that British legislation has reached finality in this matter; yet it is hoped that the necessity will not arise for many years to come when cathedrals and churches in regular use shall come within the range of some authoritative preservation other than ecclesiastical. Some urgent organisation is needed, in order that the requirements of the clergy, who are but the temporary custodians of their churches, should be considered and their fulfilment supervised by some properly constituted authority. A diocesan scheme lends itself to this purpose, but the present procedure in the matters of granting faculties and supervising the performance of works is in need of amendment. The custom of giving to structural alterations or decorative additions a memorial character is one which impedes repair and alteration in ancient ecclesiastical buildings.

The Town Planning Act of our own time recognises ancient monuments; the realisation of a municipal lay-out may be affected by the position of an historic building. Here is a matter of congratulation to architects; but, having rescued a work of the past, it is important that any repairs be of such a nature as to secure the spirit of the early builders from destruction.

It may be said, however, that Continental countries have long passed more comprehensive and stringent laws governing the scheduling and preservation of ancient monuments than we possess; yet in many of those countries it will be generally agreed that the methods of repair or preservation have been proportionately drastic in their efforts to preserve the letter, rather than the spirit, of old work. Thus in France, where excellent laws exist for scheduling either the whole or part of a monument, one finds a big organisation at work upon a wholesale reconstruction of, say, a church. A huge brick wall is built to divide completely the east and west parts of the interior. Worship is conducted in one part while the renewal of sound, though uneven, early masonry is proceeding, with general repairs, on the other side of the temporary wall. Hoardings around the exterior enclose the masons' yards and their equipment. Restoration in its undiluted form is resorted to, and although it has the merit for the moment of being unmistakably distinguished by its newness, much unnecessary destruction has taken place in the process. Many of the churches and châteaux of France have lost interest by this means, and I venture to attribute it to the effects of the systems which obtain in Government and ecclesiastical organisations.

Signs are not wanting which suggest that a similar condition of affairs is liable to arise in

this country unless the lesson to be derived from Continental practice is learned and applied. Our own Government, through H.M. Office of Works and other departments, is doing splendid service in the preservation of ancient monuments. In the quality and spirit of the later work which I have been privileged to see, great praise is due to their advisers, and in this respect Mr. C. R. Peers, as Inspector of Ancient Monuments, is deserving of our full commendation. There are unmistakable signs, however, that by reason of the system of accounts, estimates, supervision, absence of personal responsibility, and other routine necessary to a Government Department, the buildings under treatment have been receiving too much repair. The personal element breaks down under this procedure, and the staff is unable to cope with the extraordinary number of works lying in the extreme boundaries of the kingdom.

The fundamental principle underlying the preservation of ancient work in this country is that independent and sufficient treatment is required for each example. Danger lies in placing in the hands of great Government or ecclesiastical bodies the care and maintenance of these varied remains of the arts of past ages. However well organised and administered, and however competent the authority may be, the effect of such system is liable to have injurious results upon those interests and values which we seek to conserve. The element of personal responsibility is sunk in the depths of departmental procedure. The system is proof against criticism and suggestion.

This aspect of our subject is especially important, in view of the operation of the recently enacted laws, whereby so many more old buildings in a state of disrepair are being handed over to official charge. The initial repair of these works is of the utmost importance, and no undue speed or want of supervision should attend them at this time.

Here, therefore, I venture to suggest, is a vital matter with which our Council should concern itself, and it is with full respect that I submit that we leave for a time some of those intricate problems affecting the welfare of architects, and turn to an affair of architecture having a national importance. Knowledge in this subject of repair cannot be acquired from a study of learned treatises, nor from a Paper of the kind to which you have kindly consented to listen. It can only be obtained by actual handling of the work. Much is to be gained by the examination of successful repairs at other buildings throughout the country, and here I venture, with some hesitation, upon another suggestion.

Opportunities should be taken of visiting houses or cathedrals which have emerged from the process of repair; such visits would be invaluable in helping to consolidate professional opinion. The Royal Institute has no tradition or custom in arranging visits to buildings, and I do not wish to add further labours to our excellent office staff. The policy of the Institute has been one of continual encouragement and recognition of the Allied Societies, and my proposal is that these provincial bodies be invited in turn to organise an annual visit to some important works in its area. My own impression is that many of the Allied Societies would respond favourably.

The survey of the Royal Commission is proceeding with all due care and with no undue despatch. The three volumes already issued are of great value, but our impatience for more would urge a decentralisation of the work of completing the survey. Although the subject-matter is governed by the date of 1700 A.D., an extension of that limit will be necessary in a new survey, which will be required a hundred years or so hence. Many authorities recommend, therefore, an expediting of the work. I think some improvement can be made in the method of preparing the scale drawings; these are all ruled, and this style of draughtsmanship prevents the accurate indication of uneven surfaces or parts, the record of which, drawn to scale by freehand methods, would be invaluable. Constructional and other details would be interesting as a means of comparing the craftsmanship of the various districts.

In 1865 the Royal Institute issued its well-known recommendations on the "Conservation of Ancient Monuments" and "Hints to Workmen." These were enlarged and revised in 1888, and form some of the most able and useful documents which we publish. The intervening period of twenty-five years which has elapsed has, I venture to think, produced a considerable change of thought upon some of the larger principles of the subject, and a further revision would appear to be desirable. It would form an excellent work for the Art Committee.

When revised the recommendations would make a useful addition to the curriculum of the Final Examination, not because it would fit the successful candidate for the work of

superintending repairs to historic buildings, but that he would be made aware of the difficulties of this branch of our work. The candidate now emerges from the examination process equipped for a contest with a district surveyor or a sanitary inspector; but, should he have the honour of facing a parson and two churchwardens, or be called upon to direct the domestic problems of a millionaire, he will be singularly devoid of the ordinary weapons for the occasion.

As specimens of the revisions in the recommendations which the present attitude of architects especially engaged in this work appears to demand, I venture to submit the following observations:—

In the first clause it is recommended that a competent architect be consulted before any alteration is decided on. It will generally be admitted that such a course is also necessary in cases of repair.

The main principles are very sound, and show that great care was given to the original framing of the conditions, but the time has arrived when the term "restoration" should give place to an expression more consistent with the direct spirit of the recommendations.



SUTTON-ON-TRENT CHURCH, BEFORE REPAIRS.

Clauses 3 and 4, suggesting that neighbouring buildings of the same style should be examined in order that doubts may be cleared up as to the original design of any part of the building under treatment, should be eliminated. The principle of restoring missing or defaced features is one to be discouraged.

Again, the renewal of stone should, according to the suggestions (Clause 9), be of similar character. If it should by any chance replace work forming an essential part of a building, the stone should not be exactly similar, although sound, so that the repair may be clearly recorded. The same principles apply to the repair of brickwork. In both cases, stone and brick, the uses of roofing and other tiles are unlimited.

In the same clause there is the unfortunate advice of jacking up "without difficulty" a

sound wall which is out of plumb. It is not an infrequent case to find a church wall out of upright, and which has been so for centuries. Some authorities believe it to have been so originally built; but there are many walls having one face sloping and the other quite erect, which were undoubtedly so constructed, and probably for reasons of economy and effect. Jacking up is liable to set up defects from which a leaning wall is free. None of these sound walls should be touched.

Clause 10 offers two methods of constructing a new roof, and if we are to be truthful in our attitude to history, both are to be deprecated, and both conflict with the sound advice given in the "Hints to Workmen." The first is "carefully to reproduce an old existing roof, or to erect a new roof of the same pitch as the original covering," as evidenced by a dripstone on the tower walls." Both would be misleading a hundred years hence or less. Surely the right course to adopt is to erect a roof both sightly and sound, which shall not aim at misleading those who are engrossed in the study of ancient building.

Clause 11 puts into language unmistakable and convincing what is the right course to pursue. I quote it to show the necessity for removing some of the inconsistencies of our recommendations:—

"Ancient buildings will generally be found to have been altered at various periods; when this is the case the whole of the old work should be preserved and exposed to view, so as to show the history of the fabric, with its successive alterations, as distinctly as possible."

No. 15 leaves no doubt upon the subject:

"The duty, therefore, of all those having charge of ancient buildings should be not so much the renewal of what remains as its preservation; and this should embrace every portion of original work which it is in any way possible to save, for it must be remembered that new work is of no value or interest except so far as it serves to preserve the ancient design."

The lead sheets of an old roof can be recast and ancient glass releaded at the site, in order to avoid loss in transit and great expense in cartage.

The retention of fragments of old craftsmanship in the actual building is admirably stated in Clause 14, where it is laid down that the contractor shall be debarred from acquiring such objects. It should, I think, be added to include the vicar and the architect. Many an architect's office contains specimens of fine ancient carving!

When these and other inconsistencies are removed and extensions made the recommendations will perhaps be more in keeping with current opinion on this important subject, and fit



SUTTON-ON-TRENT CHURCH, AFTER REPAIRS. Mr. Weir, architect.

them better for the proud position claimed in Clause 17, as "embodying principles impossible to controvert."



WINGRAVE CHURCH, BUCKS, BEFORE RESTORATION

Coming to the valuable "Hints to Workmen" engaged on the repairs on ancient buildings, one finds that some slight amendment is desirable.



WINGRAVE CHURCH, BUCKS, AFTER RESTORATION.

Because whitewash exists on wall surfaces, the "Hints" appear to recommend its removal. Whitewash is an ancient process, and has acted as a great preservative of stone and other wall

facings. It should, therefore, be only interfered with when it is known to be of recent date, hiding some valuable paintings, and in cases when it is flaking. I do not think Manchester card is a desirable appliance for this process under any circumstances. A fine, flat knife, or spatula, is preferable.

I do not think it wise to countenance the reproduction of sections of mouldings with scrupulous accuracy; first, because it is inconsistent with our historic principle, and, secondly, an imitation of a weathered line is liable to fail in its intention.

The British mason is no great expert in copying a mediæval moulding, as one constantly sees in the Victorian restorations. Take, for instance, the simple section of a mullion; in cases where the original hollows were flat and but slightly removed from a chamfer or splay, it is a common occurrence to find that the imitated section is deeply hollowed. The former has the soft effect of quiet solidity, whilst the latter possesses a thin, cast-iron appearance.

Missing parts of mouldings can be repaired in many ways, provided that the spirit of the section, and not the accurate detail, be reproduced. The repair must be permitted to declare itself.

No new tile flooring should attempt to imitate old encaustic tiles.

The clause referring to Carver should be eliminated. It is seldom that new carving should enter into the preservation of an old building, and never that old carving should be touched, except, perhaps, for cleaning.

Some advice to bricklayers might, with advantage, be added, especially with regard to pointing. Grouting and other matters should be included, to which subjects reference is made later in this Paper.

GENERAL ASPECTS OF REPAIRS.

The architect is consulted in order to determine the actual safety and probable endurance of an old building, so that steps may be taken to prolong its life. Everything should be maintained that is sound, and repaired that is weak, apart from all considerations of taste or fashion, and, in many cases, of convenience, in order to record the history or evolution of the building.

It is no great hardship to adapt current modes of living to the domestic limitations of a seventeenth-century dwelling. A mediæval church having served the needs of a community for six hundred years should require no structural change to meet any twentieth-century ideas in ritual or ceremony. But where enlargement is necessary to meet the growth of a congregation and maintain the uses of the fabric then let all extensions be honest and sympathetic and not imitative. Therefore, all reparation should be directed to the maintenance and continuance of the historical account. Repairs and renewals are part of that story, and should be self-expressive. Pressure is frequently brought to bear by employers or by promoters upon their advisers; but a rigid adherence to this general principle will save many an ancient monument from a process of falsification which may never thereafter be detected. The importation of all ancient fittings or features to the building under repair should be discouraged. When unavoidable some documentary or other record should be made.

It is the proud boast of certain architects and builders that their new work cannot be distinguished from the old. This is an unfortunate principle, as, although a harsh note may thereby be avoided by this precise imitation, nevertheless distinctive methods may be yet employed which are both sympathetic and sound.

As diagnosis is the basis of a doctor's work, so is survey the important function of an architect engaged to repair a building. In complicated medical and surgical cases it is the universal custom to obtain second opinions. In prolonging the life of buildings such a course

is the exception amongst practitioners in architecture. In many of the important works of preservation in recent years great controversy has taken place in the methods employed, but I venture to think that the undesirable publicity given to the dissensions which arose would have been avoided if the architects engaged upon the work had consulted specialists. Here my analogy of the medical profession ends, for I feel confident that the repair specialists would not require such fantastic fees for their services as is customary in medical affairs, although great gain would result from their assistance.

It is well known that the Society for the Protection of Ancient Buildings has rendered great service in the cause which its title proclaims. Its committee holds a weekly meeting, at which questions of great diversity are debated. Advice, based upon continuous and unrivalled experience in the treatment of ancient buildings, is freely given and largely acted upon, to the historical gain of the structures and to the advantage of the promoters. The publication of the Society, entitled "Notes on the Repairs of Buildings," is now, after ten years' existence, undergoing revision and extension by a sub-committee, and it is hoped that when issued it will be a standard work upon this perpetual subject.

The Council of the Royal Institute of British Architects and the Art Committee especially have devoted many of their labours to the service of preservation. Other societies have been, and are, willing to lend their aid in these matters, so that it cannot be said that we architects are lacking in bodies or persons who are well fitted to give special advice in works of repair.

Our difficulties generally lie in prescribing the right methods and materials, but not infrequently the correct diagnosis is our trouble. Preliminary examination cannot be too thoroughly undertaken. A hasty and limited inspection but imperfectly tells of the causes at work, and it is for this reason that architects themselves should personally view all defects and not depend upon the testimony of clerks of works and others. Again, as has already been said, no two buildings are alike, and all old works must be considered according to their particular character and requirement.

It frequently happens that on seeing a crack in a wall the architect, with that promptness associated with men of action, orders the careful underpinning of that part of the structure, whereas a fuller investigation would prove that the trouble arose from a roof thrust, or some transmitted wind pressure. Then while the operatives are laboriously carrying out the instructions, and probably creating greater risks to the other parts of the fabric, the promoters are busy straining every effort to collect funds from an overtaxed community to pay the contractor.

I have seen recently a church where some twenty years ago some thousands of pounds were spent upon structural repairs, which were soundly executed at the time. The diagnosis, however, was then faulty, for the vicar and churchwardens are now faced with precisely the same problem as presented itself at the time of the previous repairs. A photograph of the settlements or cracks taken prior to the renovation in 1893 shows failures identical with those which have this year again been dealt with. This church was an interesting example of strains being transmitted to distant parts of the fabric—a matter always to be remembered in surveying an old building.

The steep roofs of the thirteenth century invariably left some sign of movement in the walls of that period; indeed, in the majority of cases the change in the later line of the upper or clerestory part of the wall has probably taken place during the time of the extension. Thrusts of roof timbers, which tend to move or crack a wall, can invariably be absorbed by tie-rods or by some correction in the framing of the roof.

Architects are frequently guilty of recommending the removal of old oak ball cages and substituting an iron-girder system of hanging bells. In the majority of cases it is possible to

maintain the oak cage which transmits weights and thrusts to parts of church towers expressly built to receive them.

The common practice of building buttresses against old walls to resist these movements is seldom attended with success. It is remarkable to observe the manner in which buttresses and other features added to a church have not succeeded in clinging to the old structure, and have failed in their functions of support; yet the ancient walls remain standing.

Too much repair is frequently worse than too little, in that additional evils are spread by an excess of new work. Failures in walls, piers, arches, vaults, and the like require to be watched, in order to determine if the causes are active. For this purpose "tell-tales" should be placed over the fissures or lines of movement, and should be dated as they are applied. They are usually made of cement in a rough way about four inches long by one inch wide. They should be kept wet to ensure a slow setting. Cement tell-tales, however, are apt to mislead, owing to the tendency of the material to expand and crack. Plaster-of-Paris is a better material for the purpose, as, although it is quick setting, expansion does not take place to the same extent. In any case the structure must be thoroughly cleaned of whitewash and saturated before the "tell-tales" are applied, and they must be carefully made—that is to say, quite true and flat—in order to stand accurate tests.

BUSINESS ARRANGEMENTS.

With regard to the business arrangements applicable to works of repair, agreements are necessary, although contracts in the ordinary acceptation of the term based upon tenders are undesirable. It may be possible to estimate the value of a new building, but it is highly improbable that the full nature or extent of repairs or alterations of old buildings can reasonably be anticipated. In the latter types of work there is so much risk in venturing upon a contract sum that waste or hardship may fall upon one or other of the contracting parties.

It is essentially desirable that where possible all reparation works be not subject to limits in time or outlay. I know of no better system than that all labour, plant, and materials should be hired or purchased by a builder or by a representative of the employer. All statements of rates of pay and hours of work of the operatives, together with all invoices of materials bought or plant hired, should be rendered by the builder to the employer weekly or monthly, as the case may be. To these sums should be added the proportion or percentage rate due to the builder for his organisation.

The financial arrangements between the employer and his agent, the architect, are not herein involved.

In cases, however, where the architect, still acting as the agent of the employer, undertakes the general advice and superintendence, and, in addition, engages the workmen, buys plant and materials, and renders periodical accounts for payment, a special form of agreement defining the relative positions and responsibilities of all parties is of the utmost importance. Architects should, as far as possible, decline such duties, for not only are the financial risks to be avoided, but the comprehensive position of adviser, builder, and supervisor is untenable, and tends to eliminate that element of responsibility which is so necessary in these operations of building.

In effect, agreements should be clear, yet comprehensive, setting out in simple language that the builder agrees to build and the employer binds himself to pay, upon terms and conditions laid down by the architect.

DURATION OF REPAIRS.

It cannot be urged too often that reasonable time is required for the efficient execution of repairs. It must be admitted that, apart from other influences, the survival of ancient works is

in a great measure due to the actual duration of building operations. Apart from records, this fact is seen in the development of the styles of churches and houses.

Repairs must be permanent in their intention. It should be remembered that no sound work should be disturbed, although repairs may be anticipated in a few years' time. Repairs to walls cannot be hurried, and must be executed in a wet state, and allowed to set before receiving weights, thrusts, or other forces inducing movement. Roof and floor timbers having been exposed to the rains must have reasonable time to return to their normal seasoned state when the roof coverings are finished.

Plastering should then be not unduly delayed, but a long setting period allowed. Strong draughts should be excluded, as well as heat and other elements inducing rapid setting.

The use of mortar in frosty weather is attended with risks. Cement is not affected to the same extent as limes.

SHORING.

Shoring is required to support walls or roofs subject to movement or collapse, and cannot be too carefully or promptly undertaken; much damage is done by the careless handling of timbers. Arches and other openings will require centering, which should be designed to counteract the thrusts causing failures in the structure.

A raking or flying shore employed to buttress a building where repairs will occupy a long period of time should have solid concrete sills, so that the timbering be not affected by soil movement and that greater and more permanent abutment be secured.

Needling must be carefully undertaken, and where the old displaced bricks or stones cannot be replaced the repair should be carried out with different materials, in order to record the disturbance and the extent of the work. Shoring should be allowed to stand for a long period before being eased or struck.

When effectually shored it is frequently desirable that the walls of a building be grouted before underpinning or other works are attempted.

All shoring which will probably be left in position for a considerable period should be limewashed, in order that it be more easily seen and that the timber be preserved.

GROUTING.

No greater advance has been made in the repairing processes in recent years than in that of grouting. Many a condemned building has been saved and many a weak structure made sound by this means, and more particularly when used under pressure.

The injurious effects of vibrations upon ancient buildings, especially those having rubble-built walls, due to fast and heavy modern traffic is a matter of grave importance. The Science Standing Committee is investigating this question with special regard to belfries.

It is to that eminent engineer Sir Francis Fox that we owe so much in the recent development of grouting by mechanical pressure. For a detailed account of the history of the grouting machine reference should be made to the Paper which he read before the Institute in February 1908.*

It frequently happens that a fractured rubble wall, a weak footing, an insecure bridge has failed, and can only be repaired by first consolidating the masonry before foundations or other repairs are dealt with. Briefly stated, the method of applying cement grout is as follows:—The operation, like underpinning, must be performed in small sections. All loose dry mortar and dust is first removed; that which escapes being raked from the open joints is blown out. Great care must be taken not to dislodge the aggregate of the wall—that is to say, the rubble, the bricks or stones, as the case may be. Large stones should be wedged up.

The parts of the wall thus cleared are then well saturated, also under pressure, after the

* JOURNAL R.I.B.A., 22nd February 1908.

face joints are blocked up, usually by wet clay. This moistening will slake the inert properties of ancient lime, and assist the process of solidification. The grout, mixed according to requirements, is then forced by the machine into the wall through a small aperture left for the purpose. The clay joints should be watched, in case the grout escapes prematurely; experience will determine when the particular section is fully grouted.

It is usual to use a slurry composed of one part of cement to one part of sharp, but not too coarse, sand. Frequently neat cement is injected into the fissures. The effect of this injection is to solidify the wall, leaving it in a state reasonably safe for the underpinning, the cutting out of cracks and bonding in strong material, or other operation.

The clay sealing of the joints is removed after ordinary setting has begun to take place, when it will usually be found that the grout has penetrated the wall or structure under treat-



GRANGE BRIDGE, CUMBERLAND: GROUTING MACHINE AT WORK.
Sir Francis Fox, M.Inst.C.E., Engineer.

ment. It is then desirable to point the more open of the joints of the external face to exclude weather. It is not necessary, however, to point internal joints, but to leave them open in order to show that the old materials have been grouted.

Grouting by hand has its limitations, and is dependent upon gravitation. Under mechanical pressure the liquid rises to considerable heights and travels surprising distances.

There are occasions—usually in thick walls—when, I am of opinion, hydraulic blue lias lime-mortar would be adequate as a grouting medium. Expansions and, in many stones, an unpleasant discoloration are then avoided.

Lime grout is very desirable where walls have not fractured but have hollow places. Lime-mortar built walls have endured a sufficient time for all ordinary purposes. There are many limes which harden to a very great degree sufficient for most ordinary purposes. Smeaton used Leicestershire limes in the erection of lighthouses. One of the Derbyshire limeworks has been working continuously for seven hundred years.

Grouting adds materially to the weight of a structure. A ton of cement and sand is soon lost in a mediæval wall, but its results are wonderful.

Winchester Cathedral has been saved by this method. In a recent conversation with the Dean, he informed me that "it is the safest building in England; it is monolithic." It is hoped that this will be found to be a sound judgment.

Sir Francis Fox has grouted and saved historic bridges condemned by county authorities; he has grouted the walls of a large institution when entire rebuilding threatened the proprietors, whose funds were unable to bear so great a strain; he has grouted the eighteenth-century walls of a London building upon which a dangerous structure notice had been served by a

watchful district surveyor, who, after testing the repaired house, accepted the process for the more customary one of demolition and rebuilding.

Members of the Institute Council have been privileged to inspect the works in hand at St. Paul's Cathedral, where grouting is being employed to the utmost advantage. Here the main piers and buttresses of the dome are faced in ashlar, but have a core of rubble, sometimes of chalk, but principally of small stones. The solidifying of these features will prepare the way for any further structural operations which become necessary; but it is to be hoped that these works will be pressed forward, and that risks from delay or insufficient staff will be avoided.

REPAIR OF RUINS.

In many respects ruins require special treatment in their repair. Much loss of interest is occasioned by a general scheme of reparation being undertaken at any one time. It is, therefore, essential that only such parts as are in a state of collapse or are causing injury to other parts should be touched. In effect the repairs usually necessary for a building in use should



HOUSES IN GREAT ORMOND STREET, BLOOMSBURY, REPAIRED BY GROUTING. Sir Francis Fox, M.Inst.C.E., Engineer.

have a modified application to those in a ruined state. But there is no wholesale department in the business of either.

Generally speaking, the tops of walls, arches, or other features require most attention, in order to arrest the penetration of moistures and the consequent disintegration of masonry. Asphalt, tar-paving, cement-concrete, or tile-paving are good media; in each case the method of laying should be governed by the necessity for throwing off water. In many cases soil and turf may be relaid upon the paving or covering in order to retain the hand of Nature, which provides that pleasing compensation for the sense of loss sustained by the ruined state of the building. Foundations marking the site of departed works should be specially preserved. Ivy and other large growths should be constantly cut back. Ivy will grow completely through

a 3-foot stone wall, and appears to receive nourishment from mediæval lime-mortar. The chances of the retention of moisture thus afforded renders the removal of these creeping things an essential step.

Similarly attention should be directed to the lower parts of ruins, so that grass or soil shall not accumulate to the detriment of walls, piers, floors, and other parts.

Roof protection should be provided to any features such as sculpture, carvings, woodwork, metalwork, and the like, subject to injury or decay by reason of exposure to weather.

All loose features should be firmly built in and wedged up in good mortar, whilst all fallen stones, moulded or otherwise, should be collected and preserved from risk of theft or damage by traffic.

SCAFFOLDING.

It is most important that scaffolding and plant generally be utilised in such a way as to cause no injury to buildings by its erection and removal. For this purpose an independent scaffold is generally found preferable. This type may be thought to be more expensive than the attached kind; but inasmuch as cutting away and reinstating are avoided the relative costs cannot be said to vary appreciably.

It is sometimes found that putlog holes remain in ancient walls, in which case an ordinary single scaffold may be used. No new holes should be permitted to be cut. Thirteenth-century flint rubble walls sometimes retain putlog holes, and they are formed in stone- or chalk-dressed openings. These are found in stages at intervals similar to those used at the present day. In most cases the intervals of the stages should be adapted to the requirements of the actual work. Old putlog holes or resting places or ledges should have suitable protection by straw or sack packings.

Various types of modern wood and iron scaffolding are serviceable in the repair of old buildings, but the common is to be preferred to the patent variety. Cradles suspended from high positions are useful and economical in particular cases; but where the repairs involve repeated hoisting and lowering of the plant the cost becomes heavier than ordinary scaffolding. All scaffolds, however, should have means by which architects of all ages and dimensions can easily ascend to and descend from the works in progress.

PULLING DOWN.

Although the subject before us is preservation, there are occasions when demolition is to be faced. No effort should be spared in the careful handling and protection of material intended either for re-use or removal. Although the occasion is rare when a rebuilding with old materials is entirely satisfactory, it is essential to mark or number the stones, timbers, and other parts, and to provide due protection.

When the Tattershall Castle fireplaces were taken out an insufficient scaffold was erected, and these priceless carved stones were dropped upon the ground below, causing several of them to be fractured. Some of the long stones bonding into the walls were cut off, and other mutilations were perpetrated. It is a matter of national congratulation that these mantelpieces have been carefully replaced by Lord Curzon in their original position, and, thanks to the personal supervision given by Mr. Weir, they look little the worse for their adventures.

Pulling down should be deferred until the last available moment in cases of necessary alteration or enlargement, in order that hope of retaining the old work be not abandoned until all alternatives have failed.

To illustrate this point I would refer to a Norfolk example [see illustration page 109]. The controversy at Overstrand will be fresh in the minds of many. Here a ruined and roofless mediæval church occupied a spacious churchyard containing also a Victorian structure in regular

use for worship. The latter, appearing to become inadequate to the needs of the parish, required enlargement; but, after an acute public discussion, was abandoned in favour of an extensive enlargement and reinstatement of the ancient ruined fabric. A new north aisle was to form part of the ultimate extended church, but was to be deferred until funds were forthcoming for its erection. Vestries, however, and a heating chamber are now built, whilst the reinstatement of the ruin is proceeding. But the sound north wall, containing the stonework of two windows, has been pulled down to make room for a new arcade, which is to be filled in, pending the influx of money to pay for a north aisle to be built hereafter.

There are two serious comments to be made. First, the initial extent of the renovated church has substantially the same seating capacity as the existing modern building; so that no immediate cause existed for such a restoration; secondly, it was an outrageous proceeding to demolish an old building in preparation for work for which the necessary funds may never accrue and which the general conduct of this matter may have caused to be delayed indefinitely.

At the completion of all repairing works there is an accumulation of minor objects of interest, such as tiles, carvings, pottery, glass, implements, &c. These should be labelled and stored in the building for inspection. On no account should such things be removed. For several recent months in the *Architectural Association Journal* a paragraph or advertisement appeared inquiring for old encaustic tiles. Nothing could be more deplorable than the sale or traffic in these materials, which have great value upon their original site, and nothing is more disheartening than to find inadvertent encouragement being given to this practice.

UNDERPINNING.

There is, I think, too great an inclination amongst architects and constructors generally to underpin old buildings, especially those of mediæval date. Rubble walls indicate the action of roof thrusts or undue movements very readily upon the inner and outer surfaces. It is then that underpinning is hastily resorted to, and it frequently happens that the operation is proved to be unnecessary. It involves, moreover, risk of disturbance to other parts which are sound. Underpinning is more effectual when undertaken generally rather than partially.

It is remarkable how little apparent consideration was given to foundations of old churches and houses. There is no order or practice in the ancient method of transmitting building weights to the soil. Generally speaking, the footings are quite shallow, and beyond containing large material are usually without definition in the spreadings when such exist. Yet it must be admitted by their simplicity that foundations were well understood by the early builders.

Foundation failures are invariably due to such causes as the digging of graves, heating-chambers, cellars, to defective drains, and to alterations and other subsequent disturbances.

As an example of the knowledge of mediæval builders in the matter of clay soils the following is of interest. At Chattisham, near Ipswich, the land is entirely a stiff clay. As frequently happens in church towers, the weakest angle is that containing the turret staircase, and in this instance it had, together with a rubble and stone buttress, settled considerably, from causes traceable to a defective drain. The remainder of the tower walls was in fair condition. On examination, it was seen that in building the tower a large pit had been dug 1 foot 6 inches beyond the area of the structure. Into this hole, the clay sides of which were clearly disclosed, had been thrown coarse river gravel, and directly upon this the rubble walls of the tower were built. There is an almost entire absence of footings, and the bases of the walls are unduly near the surface of the ground; yet the tower generally has stood its 600 years remarkably well. Underpinning was not required, but a consolidation of the gravel bed became necessary before rebuilding the disintegrated staircase turret and buttress.

All underpinning must be carried out in short lengths, and the new material be wedged

or pinned up to the old. A damp-course should be inserted when possible. Horizontal damp-courses should project beyond both faces of a wall. No underpinning should be begun until the soil is free from possible influence by drainage. Cement is the best matrix for mortar used under these conditions: it should be of a quality capable of passing a standard test.

DRAINAGE.

Defective drains are a perpetual source of danger to buildings. These faults are not detected until dampness or some failure in walls is observed. Similar injury is occasioned by faulty eaves gutters and downpipes.

Concentrated water soaks into and loosens foundations or penetrates walls, to the destruction of woodwork and decoration; the soaking-in is intermittent rather than persistent, and therein lies much of the trouble.

In the matter of churches surface channels are in all cases to be preferred to hidden drains, and should at all times be kept clear. In cases where eaves exist it is often desirable that no gutters or downpipes be provided, for the water can then fall upon a paved walk provided with a suitable channel, and the whole laid to proper falls. Water coming off a valley or a tower may have a shoot to throw it clear of the structure on to a wider paving at the foot of the walls. Provision should be made for receiving the splash by the erection of a stone or tiled plinth, or by pointing the lower courses of the wall in cement. This plinth is useful in covering the joint between the pavings and the walls; it is often found that the former moves away from the fabric. The omission of eaves gutters greatly enhances the interest of a building.

Surface channels should be laid below the level of the adjoining floor-line. Retaining walls may be found necessary when the ground-level is above floor-line. When underground drains become necessary it is imperative that they be laid some distance from the walls, and in churchyards should follow the lines of paths in order to avoid disturbance from burials.

Drains of churches usually take care of themselves; those of dwellings have statutory supervision, and are too well understood to require reference on this occasion.

When eaves gutters and downpipes are indispensable in important buildings they are best made in cast lead, and although the initial cost is very much greater the constant painting of the cast-iron varieties lessens the apparent gulf between the cost of the two materials.

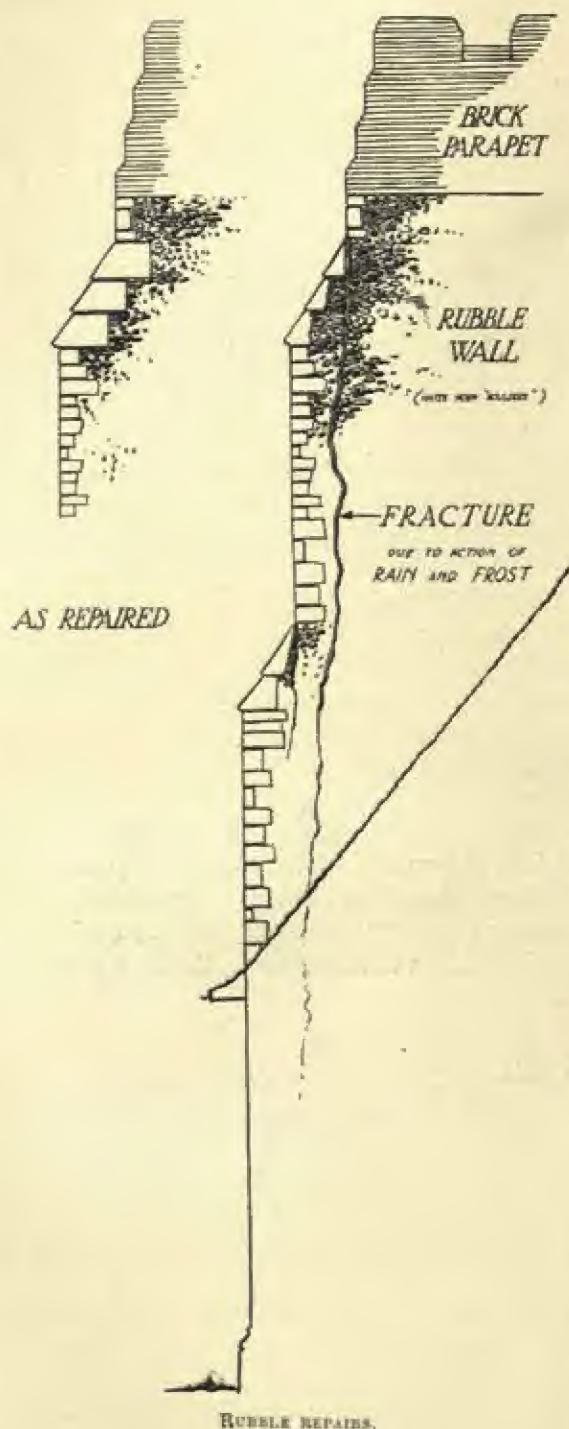
Iron pipes should always be of circular section; square pipes should only be used when fixed well clear of the walls to enable the periodical paintings to take place. Expansions due to temperature cause less havoc under these conditions.

RUBBLE WALLS.

It may be said that more than half the ancient buildings in this country possess what may be termed rubble walls, and are therefore the most general of the repairs with which an architect has to deal. Stone and brick in certain districts were not procurable in sufficient quantities to produce the desired masses. Rubble was invariably employed to supply the deficiency. A rigid discipline in the use of materials in mediæval times is evident from the variety in size and description of materials seen in every work, and this has added much to the charm of early building. There was no wastage. All sound stuff, however small, was used, and it was not only good but efficiently built. That is a lesson we very much require to apply to our own work. We are too apt to discard small available material.

In rubble-faced walls all small materials, such as flints, pebbles, fragments of stone, bricks, and tiles, were mixed with lime-mortar. The whole was worked up and laid in a concrete manner in conjunction with stone or brick quoins set in the internal and external angles. The rubble

could only have been laid against boards or other centering in the same way as we build concrete. Instances are met with where the marks of the joints in the boarding show upon the mortar faces.



It will readily be understood that the use of angle stones was twofold; first, to facilitate the accurate building of the rubble, and then to afford greater permanence to the exposed angles from the effects of wind, rain, and frost.

The excellent condition of the rubble walls of the Romans is a remarkable testimony to their constructive knowledge. Local materials were always used and understood by them. The tile bands which are sometimes bonded through the full thickness, and often built to a partial extent into rubble walls, are not only pleasing in effect, but became, in my opinion, absolute necessities in good concrete building. London Wall was so built. Early mediæval workers in the Eastern Counties made use of these tile bonding courses; but, generally speaking, rubble walls are devoid of ties of any kind. No rubble walls have survived so well as those with the tile bands.

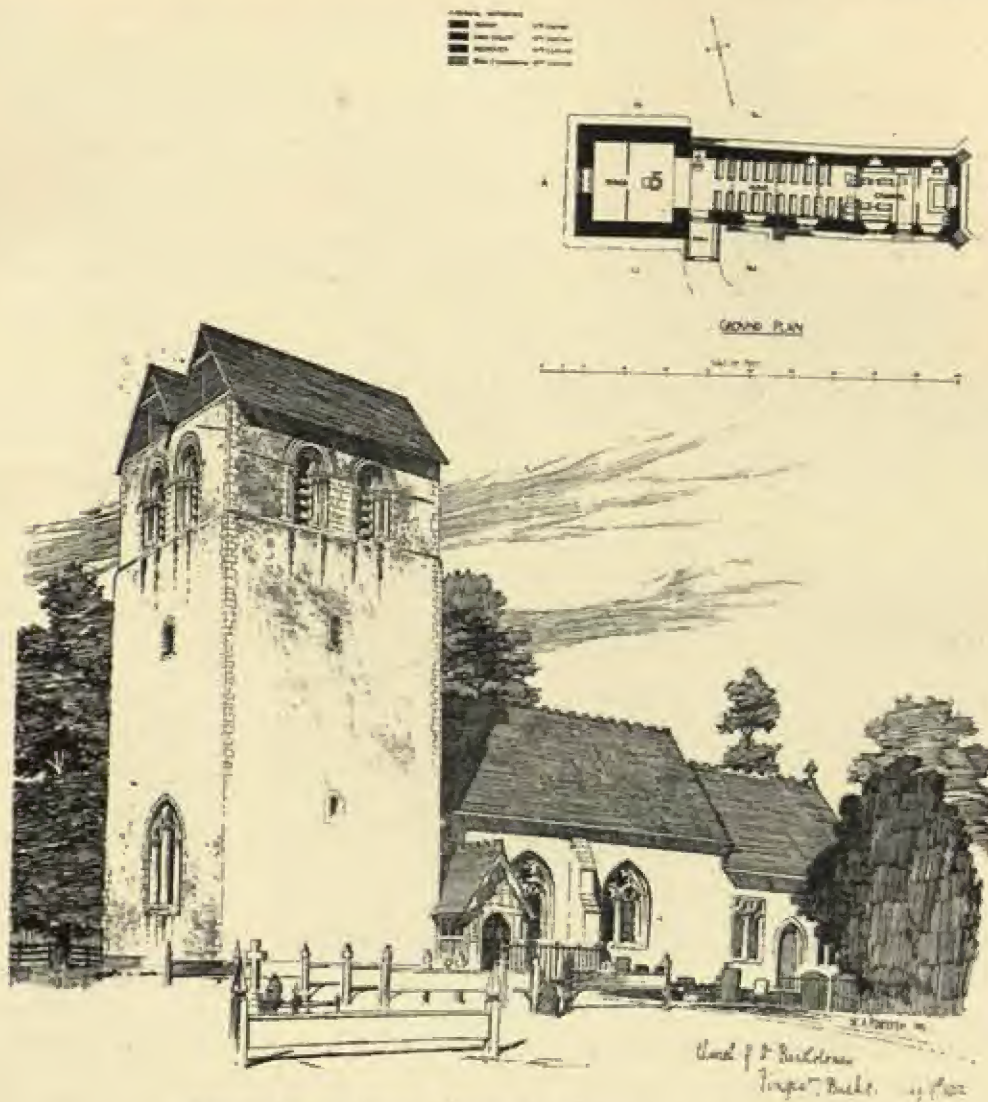
Rubble walls are sometimes misunderstood by those who repair them. It is the invariable custom to point the spaces between the aggregate materials after the matrix mortar has to an extent been removed by weather. The pointing is, moreover, usually performed by the aid of a metal trowel.

In almost all cases no pointing is required. The faces exposed to the rainy quarters are those mostly found to have these mortar interstices washed out; but it is only in the dire extremity of the solid materials having become loose that any repair is necessary, and, indeed, can be efficiently performed. Then it will be necessary to cut out convenient patches, prepare the wall, and build in the old material in a concrete manner with centering. Bonders should at the same time be inserted. In all cases flints used in repairs to facings should be "dug" and not used from surface collections.

MASONRY.

The decay of masonry presents many difficulties in preserving or protecting ancient buildings. Stonework can be patched either with new stone or other materials; it can be entirely rebuilt, and it may be coated with preservative solutions.

The failure of the ashlar or other facing, moulded and carved work is due to atmospheric causes, and the action of the destructive agent will always vary according to locality or season.



FINGEST CHURCH, BUCKS. EXAMPLE OF RUBBLE-FACED WALLING.

In this matter, therefore, no general rule can be applied to the treatment of stone buildings. There is to be observed, however, the governing principle of clearly expressing the repairs or replacements in all works of preservation.

No more instructive instance can be quoted than the sad decay of the stonework of the city of Oxford. Here the failure of the local material is a matter of deep regret and a subject for serious consideration. I think it is generally admitted that the mediæval builders used sound

material obtained from the neighbouring quarries, but the architects of the sixteenth, seventeenth, and eighteenth centuries employed inferior Headington stone, the facing of which fared so disastrously in the last century. The flaking and crumbling of this ashlar work is familiar to most of us, and my purpose is to draw attention to some of the methods employed in dealing with the defective work.

The facing of the St. Auld's front of Christ Church has perished considerably, and generally throughout the façade. An entire refacing has been carried out by Mr. Carøe,

giving to the buildings a newness which, although a drastic expediency, was perhaps unavoidable in the circumstances.

At Magdalen College Tower Mr. Warren had a more structural problem to face. In many respects the work of repair was attended with some anxiety, and great care was taken to effectually arrest further decay.

This work, in effect, consisted of piecing or patching the old structure with new stones, and in many respects the method was easy of adoption.

At St. John's College, however, an entirely distinct process has been applied by Mr. Harry Redfern. Again the Headington stone had seriously failed on the garden front, not alone confined to ashlar, but to mouldings, mullions, and other important parts.



ASTONBURY, HERTS. Repaired by Messrs. Forsyth and Maule.

No new stone has been inserted to replace old material. All loose and badly decayed work was removed to receive roofing tiles and hydraulic lime-mortar built to the approximate form of the mouldings or features repaired. Ashlaring and copings were similarly treated, and when the work proceeded the new materials were rendered with the lime-mortar. This method has many advantages, in that it ensures a sound structural combination between new and old work by the facilities for pinning up. The repair, moreover, although sympathetic in tone, is readily expressed so that in generations to come he who runs may read which is the work of Inigo Jones and which the work of a Fellow of this Institute in the twentieth century.

The preservation of stone by the application of solutions has much to recommend it, except the quality of durability. Many media are commercialised to such an extent as to

arouse our caution, but no test other than that of time upon a building should receive our consideration.

It is known that those liquid remedies claiming silica as their basis are liable to set up worse diseases. The first application penetrates to a certain depth and hardens; the subsequent applications are expected to, but probably do not, increase in penetration, but rather seal up whatever pores were left by the first coat. The mortar joints are also treated in order that moisture shall not enter the wall and get behind the sealed face of the stonework. The aerating properties of the wall are arrested. Any dampness, therefore, lying in the wall or entering from other sources is liable to be the cause of expansion in cases of frost, and either the inner or outer faces are injured thereby.

The process of limewashing appears to avoid such risks. At Westminster Abbey a great work in limewashing is being carried out by Professor Lethaby. The principal original material is Reigate firestone. Upon most of the exterior this has been in former times largely replaced



WEST STOW HALL, SUFFOLK. Repaired by Mr. W. Weir.

by other varieties of stone by the "replacing" school of architects. The only remaining original material having external exposure is fast decaying in the atmosphere of London, but the destruction is being arrested by the application of limewash. The operation consists of the slaking with boiling water of Barrow hydraulic lime to produce a comparatively fine solution or paste, and of the application, by means of a brush, of two or more coats, according to the state of decay. To avoid glaring results, some colour is utilised to assimilate the tone of the applied material to its environment.

The process has been going on in the vaulting of the cloisters for some years, and is found to be a successful "healer" of the diseased stone where applications of other reputed preservatives have failed. In appearance, too, the effect is good, as after the lapse of time the lime appears to have entered into structural combination with the stone, and mouldings, joints, and other details become sharper and well defined. It is satisfactory to think that the spirit of the beautiful early work in these cloisters is retained by so simple a process. The idea is

not new, for it will have come within everyone's observation that a whitewashed stone wall is often preserved when the untreated surfaces of the same wall have perished. It is in the nature of a revival. This limewash is gentle in its action.

The application of baryta water has been extensively and successfully attempted. A grey tone is produced upon decayed stonework after it is prepared for treatment. The process is laborious. In making use of the foregoing means of repair a few practical observations may not be out of place.

It is claimed by many that stone should be quarried and used fresh, so that the "sap" is allowed to evaporate when the material is set. A harder external face is thus formed than if the



ST. JOHN'S COLLEGE, OXFORD: GARDEN FRONT FROM THE EAST.
From Mr. Aymer Vallance's *Old Colleges of Oxford* (Barnford).

stone is free from sap when dressed. Mortar will be enabled to set less rapidly, while the body of the wall will have less tendency to set independently or separate itself from the facing. Others attribute decay in stone to quarry sap. This is a subject for investigation.

All inserted stones should be pinned up in tile or slate, and care taken that the surrounding wall, as well as the new material, be well saturated. Mediaeval builders were great users of tiles for this purpose. Tiles should, of course, be hand-made and of a roofing variety as a rule. The pointing of mortar joints should differ from the original work. Materials must be carefully selected, in order that the repairs be permanent. Stone is especially important. The recent

repair of a Victorian stone restoration to one of the few mediæval buildings in London emphasises this matter.

Lias lime-mortar is preferable as a general rule to cement-mortar, by reason of its slow-setting nature, and its avoidance of discolorations, expansions, and other causes of injury.

Brick walls, in the structural sense, do not call for any great difference in treatment; the bonding in of sound materials, the insertion of footings and damp-courses and kindred requirements are similar in process to rubble or stone walls.

New facing bricks of sympathetic yet of ascertained durability are necessary for the replacement of missing old materials where such renewal is essential to the protection of the building. Old weathered materials falsely record the story of the workmanship, which is the actual story we wish to preserve.

Roofing tiles are of great use in the piecing and repair of brick walls, and cannot be too frequently used. Slates are legitimate substitutes where hand-made tiles are difficult to obtain in pinning up or wedging new work to old. Firebrick should with rare exceptions be used in old buildings.

Reinforced concrete is best for lintels built into old walls; these may be inserted or cast in position, according to circumstances. It is a material, however, which requires careful application. The large proportion of steel used in reinforced concrete buildings to-day leads one to believe that trouble will arise in time from the action of the steel, due to climatic changes, and that the unequal expansions and contractions due to heat and moisture will induce failures in years to come. Old buildings in use have structural histories of 800 years; ferro-concrete is in its infancy.

Steam and other mechanical cleaning processes of external brick and stonework are to be undertaken with caution; there is a risk of opening the pores of the material to admit fresh causes of trouble.

POINTING.

Pointing is the only repair which is common to all buildings, and will vary in its materials and manner according to circumstances. When applied to historic buildings care should be taken that some distinction, however slight, should be made between the finish of new and old joints. What is of greatest importance is the determining of what shall be pointed and what left untouched; but I think as a general rule this question should be governed by the extent to which open joints are liable to cause injury to walls by the admission of weather. A slightly recessed joint should never be touched; a deeply sunk joint must be pointed.

Great care is required in preparing open joints for the new mortar. As a rule a joint which cannot be prepared by raking should never be pointed. No joint should ever be cut out or hacked out unless for some special purpose, such as grouting. After removal of loose particles the old work must be saturated in order that the moisture of the new mortar be not absorbed by the dry wall, thereby reducing the setting of the new mortar. This wetting will also energise the inert qualities of old lime-mortar and assist to a moderate extent a structural combination in the two mortars.

In the majority of buildings with which we in this country are concerned cement pointing is detrimental both to their preservation and to their appearance. Cement is a powerful ingredient, and is liable on setting to expand and loosen wall facing. Frequently it is seen that cement pointing has remained intact when the brick or stone facing has perished; the ledges thus formed retain the moisture in the wall and prevent rain running off as in the case of an evenly-worn wall, such as a lime-mortar permits, and decay is accelerated. With the many limes in use a good selection can be made for the mixing of sound mortar. Blue lias

limes are, perhaps, the most durable in vertical work. The same material, stiffened by a limited admixture of Portland cement, should also be used for horizontal work, such as the tops of walls. Sand cannot be too sharp and coarse. When fully laid in a prepared joint the mortar should be pressed in by a wood tool, or by the thumb or fingers. The joint should never be finished with a trowel unless it be cut off flush with the facing; generally speaking, however, a slightly depressed joint is preferable for weathering reasons and for expressing the interest of the walling materials.

ROOF COVERINGS.

Tiles.—The repair of old tile roofs is a matter deserving our caution. Into the numerous methods of laying tiles throughout the country it is not within the intention of these notes to inquire. What is of paramount importance, however, is the quality, and in this respect I would urge the sole use of hand-made sand-faced tiles, to the exclusion of machine-made or pressed materials. This is necessary for durability, apart from the mean thickness and hard lines of the mechanically produced materials. Reference to this subject is, I feel, desirable in the interests of clients and architects, judging by the many recent failures brought to my notice. A sub-committee of the Science Standing Committee is engaged in investigating failures in roofing tiles, and it is to be hoped that an early publication of its findings will be made.

Old roofs appear to gain in scale and interest when the repairs are visible. It is not always possible to secure old, weathered tiles for repairing ancient roofs. Rough, well-burnt materials should, however, be used, and the tiles should possess considerable "camber," not only in their length, but in the width. They should also have generous substance.

The cambering of tiles is, perhaps, the most important quality in their manufacture. Capillary attraction is thereby reduced, and the air spaces thus formed are valuable for assisting evaporation of moisture and in preserving the tiles. This is important, for in my observations of the many failures of machine-made tiles it is invariably the roofs nearest the ground or in damp places which fail most. To exclude draught and driving snow from tiled roofs it was the ancient custom to lay the tiles in hay or straw. In Norfolk the spaces between the laths were filled with reeds. In each case, however, the packing material was kept away from contact with the ordinary rains, and was confined to the heads of the tiles. Evaporation was but slightly arrested. In all cases counter-battening is essential to the successful use of tiles. These under-battens, if laid diagonally, will brace the roofs against wind-pressure in a wonderful way and provide a convenient means for fixing laths when plastering between the rafters is desired. The bedding of tiles is to be avoided, as, amongst other risks, the tails are liable to be broken in frosts. Torching is good when used to a limited extent.

The rounded valleys of old roofs are delightful features to the eye. But it is remarkable to what extent they have been, and indeed are always being, repaired. Bedding was the principal method of fixing. I venture to think that most of these old examples were unworkmanlike, for the simple reason that in endeavouring to maintain the uniformity of the horizontal courses the tiles in the centre of the valley lost their "lap"—that is to say, these particular tiles were not made long enough in order to provide adequate lap to meet the flatter slope which the valley naturally assumes.

A very good way of producing rounded valleys, although at the expense of maintaining the horizontal courses, is to fir out to a width of 15 inches and to hang "tile-and-a-halves" up the centre of the valley. The ordinary courses follow from these middle tiles, and the extra lap in the valley is thus provided for.

The repair of houses sometimes extends to tile-hanging or weather tiling. One small point is worthy of notice. Cutting is unavoidable at the intersection of the vertical tiling with

the roof line, yet if the horizontal line be maintained it happens that a few end tiles will lose their nail holes in the process of cutting. This may be avoided by turning up the lines of the last tiles at the end of each course; extra cutting is involved, but provision for adequate fixing is made.

Lead Roofs.—It is perhaps unnecessary to remind architects that cast lead sheets are preferable to the milled quality. Re-casting old lead should be done on the site of the building under repair. Flats should receive a fair slope of at least 1 inch in 25 or 20. Boarding must be run parallel with the fall. Welts should, if possible, be used on church roofs. Wood rolls when used should have grooves or throats to arrest capillary attraction. Drips should have similar provision.

Asphalte.—Few materials require more careful selection than asphalte. It is extremely difficult for architects to tell good from bad. It is, however, essential that the bitumen should be thoroughly distilled before mixing with mastic asphalte, and be devoid of fibre. This material, never found in ancient works in this country, is of great use when other materials cannot so readily be used to effect structural repairs. It has many qualities which render it attractive in exposures to moisture, heat, and cold. It is especially valuable in covering old copings and cornices, rendering their preservation comparatively easy, without disturbing the old work. In all cases it should, however, be kept from view, as its uniform character does not please the eye in any sense.

Limestone- and tar-paving is another useful and efficient means of protecting the tops of walls, vaulting, or foundations of ruins. Turf and other growths should, however, be relaid upon it.

PLASTERING.

In no department of our work is greater care required than in the manipulation and application of plaster. In old buildings greater caution still is necessary in order to secure adhesion of new material to old surfaces. Material is all important.

It is not necessary to remind those concerned with old places of the presence of paintings and other decorative works below old whitewashed faces; the preservation of these colourings is a matter apart from ordinary structural repair, and should only be undertaken by those much accustomed to the work.

Repairs to plain plastered surfaces should extend to the actual defective area; the temptation to replaster a whole wall for smartness and uniformity should be avoided as far as possible.

Limes must be reliable and of known condition. Sand cannot be too coarse or clean. Hair should be obtained from tanneries where the old-fashioned process of detaching by the immersion in lime is still in force. Most hair now in use is removed from hides by means of chemicals, and is, in consequence, brittle. Leather suffers by the same process.

Plastering can be applied in one coat. No more than two, however, are necessary, and it should always be spread and worked up with wood floats. Smoothness of finish, which is always out of scale as well as sympathy, is thus avoided in wall treatments. It is useless in external work. The ornamental and geometrical patterns seen in the Eastern Counties domestic work were necessary to the weathering properties of the plaster.

Rough plaster will dry out better than smooth; it also causes condensation to a much less degree than fine finishes, and distemper will bite at once and not scale off. Slow setting, however, is always necessary, and involves much preliminary and subsequent moistening of old and new work.

Metal lathing should not be used. Decorative plasterwork requires very skilful handling for its protection.

FLOORS.

The greatest wear and tear upon a building is perhaps to be found in the floors. Renewals should, as far as possible, be made with materials kindred to the old. Where modern flooring is indispensable it should take the form most harmonious to the position in which it is laid. Uneven floors or pavements should not quickly be condemned; they can be made fit for use by ordinary repairs.

All paving laid upon concrete should have a heavy layer of dry rubbish or hard core immediately upon the soil; this bed should be rammed and of an absorbent nature. For this purpose broken brick is best, and condensation is greatly reduced. A layer of agricultural drain-pipes is an efficient, though costly, process. All new pavings, whether tile or stone, should, for appearance, have large joints.

It is not necessary again to mention that mediæval encaustic tiles should be jealously guarded and retained in their original position. Any dampness showing in the floors may involve the relaying of the tiles upon concrete; in this case the old materials should be bedded in lime-concrete.

In thanking you for your patient listening, I would summarise my remarks by stating that I have endeavoured to draw attention to matters of urgency concerning our ancient buildings involving the loss of interest which may arise from wholesale departmental repair, from insufficient and inexperienced supervision, from neglect to consider each work apart from all others, and from that lack of importance which we ourselves are sometimes inclined to attribute to this branch of our studies.

DISCUSSION.

Mr. GEORGE HUBBARD, F.S.A., *Vice-President*, in the Chair.

MR. LIONEL EARLE, C.B., C.M.G., Secretary of H.M. Office of Works: I have been asked to propose a vote of thanks to Mr. Forsyth for his interesting and able Paper. I only wish that somebody more competent had been invited to perform this pleasant task, as, being but a layman in all matters appertaining to building and architecture, I feel rather in the position of a non-scientific man being called upon to discuss the latest phases of cancer research with an assembly of eminent doctors. But I know you will be lenient with my shortcomings and excuse my presumption on the grounds of the deep-seated interest that I take in all questions affecting ancient monuments. The only claim that I can make to take any part in to-day's proceedings is due to the fact of my being the permanent Head of a Government Department dealing with large and varied questions of architecture and building, and more particularly of that very important branch which deals with our national ancient monuments. On this point I may perhaps be allowed to say a few words arising out of Mr. Forsyth's Paper. He has referred in terms of generous praise to the good work done by this particular branch, praise which, in my opinion—and I speak with a fresh and unbiassed mind, as I have only been a little over a year in my present Department—is fully deserved. I have no hesitation in

saying that, thanks to the knowledge, training, and taste of our Chief Inspector, Mr. Peers, and to the remarkable skill, amounting, in my opinion, almost to genius, of Mr. Frank Baines, the architect in charge of this branch, it is, in its own lines, one of the best administered that I have ever come across in a somewhat varied career in the public service. In proof of this I may mention with pride, but in confidence, that I have not received one single protest against the way our Ancient Monuments Branch has carried out any of its repair work during the whole time I have been at the Office of Works. This is the more remarkable, I think, because, firstly, as we all know, a Government is always fair game to attack; and, secondly, because the critics often hold very strong, but somewhat divergent, views on all questions involving taste as well as construction. Mr. Forsyth has hinted that some of the buildings, owing to certain defects in the Government system, have been repaired too much. I should like to tell you that, although his criticisms may be just, they are not just either as regards the cause, or in putting the blame on deficiencies in the Ancient Monuments Branch. Certain buildings like Holyrood, Glasgow Cathedral, Chelsea Hospital, Somerset House, Edinburgh Castle, have not been under their care. I have already transferred some of these buildings to Mr.

Peers' watchful eye, and I am taking steps to transfer all such buildings which can be properly classed as ancient monuments, whether in occupation by the military or Government officials, to Mr. Peers' and Mr. Baines' fostering care. It is not the system which is at fault, but the methods of dealing with these buildings. What I mean is, that naturally among a large number of architects there are many who have not had the opportunity of an actual technical expert training, such as Mr. Peers has had. But now, as I say, these buildings which can in any way be classed as ancient monuments are going to be transferred to the Ancient Monuments Branch. Although in daily use as a Government Department, as Somerset House, work will not be done upon them without having the hall mark of the Ancient Monuments Branch placed upon them. In this way we shall obviate the criticism which, though perfectly just, Mr. Forsyth has called attention to in his remarks. I am bound to say that Mr. Peers has, on several occasions, brought to the notice of the Board restoration which in his opinion is in excess of what should be done, and this, in every instance, has been immediately rectified as far as possible. I may mention that at the present moment in France I am informed there is a considerable movement among archaeological experts to protest against the over-restoration which has been carried out by the Ministry of Fine Arts; and I am bound to say, having travelled largely in France, that I think their great fault in the past has been over-restoration. All our efforts are in the contrary direction over here. At this stage I would also like to say that if there are any members of this Institute—which has so often tendered its hospitality to myself—who would like to inspect, or learn, or make inquiry at any stage of work as to what is being done to ancient monuments under our charge, I shall be only too happy to give them permission to visit and inspect them at any stage before or during repair work if they make application through your Council. All we wish to do is to have our efforts as much before the public eye as possible, so that we may get genuine criticism if we sometimes go astray. A great step has been made by the Ancient Monuments Consolidation and Amendment Act passed last Session, which gives the Commissioners of Works certain much-needed powers to prevent acts of vandalism. We have given earnest thought to the constitution of the Advisory Boards for England, Scotland, and Wales, and these are now practically complete. I believe that when the names of the eminent men of all shades who have patriotically agreed to serve are published, as they will be at no distant date, these Boards will command universal confidence and respect; and no nomination and acceptance has given me more personal pleasure than has that of your distinguished President. I have at my office three docu-

ments in my Department, which will ultimately be published, and which I think may be of interest to some of you. I shall be willing to show them to anyone anxious for information. The first is a Report on the use of limes and sands for pointing. We get enormous experience from the number of buildings we have to deal with. The second is general instructions which have been issued to foremen in charge of works of preservation. These will interest Mr. Forsyth, though perhaps he has already seen them. It shows the care with which each individual instruction is gone into before any foreman starts the work. The third is a Report upon the result of rough tests undertaken with various stone preservatives. The question of the treatment of decaying stone, due to the presence of sulphuric acid in the air, has given us, and still gives us, much anxiety. We have made numerous experiments, particularly in the Chapter House at Westminster, with baryta water and other ingredients, but, alas! up to the present, with no satisfactory results. The decay of stone is a matter of such far-reaching importance, particularly in relation to the preservation of ancient monuments, that I have persuaded the Treasury to give me a grant of money for one, two, or three years, to institute a scientific inquiry, and I hope to obtain the eminent services of Professor Laurie, of the Heriot Watt College, Edinburgh, to this end. I have also moved the Foreign Office to inquire officially of the Governments of France, Germany, Italy, Greece, and America as to whether any scientist in those countries has ever evolved any treatment to combat this all-serious evil. I will conclude by moving that a warm expression of thanks be voted to Mr. Forsyth for his interesting Paper on this fascinating subject.

MR. THACKERAY TURNER, F.S.A. [F.]: It is difficult to say anything beyond thorough and strong praise of Mr. Forsyth's Paper. It is a difficult Paper to write, because of the extent of the subject, and it is difficult for me to speak upon. I think this most useful Paper ought to lead the way to a further study and consideration of the subject. Now that it is in the hands of a Government Department, we shall be treating it in a more serious and wider sense than in the past. To my mind, it has been perfectly shocking that any of our works of art, in the shape of ancient buildings, should have been at the mercy and opinion of any one person, whose whim was uncontrolled, except, perhaps, by a vicar and churchwardens. I am certain no building can be dealt with properly if it rests on the judgment of one man. Though I have formed my own opinion as to how a building should be treated, I have never for a moment thought of acting on that opinion without consulting many others to hear what they thought of my point of view. I think one of the strangest outcomes of my work as Secretary of the Society for the Protection of Ancient Build-

ings, has been that whereas for twenty-eight or thirty years I, with the aid of my Committee, have been striving to get buildings properly repaired, we have been affecting for good modern architecture. I am sure that the method of properly repairing ancient buildings is one of the most instructive studies that men can enter upon to teach them modern building. I am perfectly certain—and I speak as a brother architect—that for a man to start practice straight away when he has attended the classes which are advocated nowadays, and gone into an architect's office, is a great misfortune. He labours at a disadvantage, because every builder can bowl him out over and over again upon practical questions; probably the very workman will know things which he does not. Because really an architect needs to know every trade which is employed in building; that is almost impossible for any man to know, and yet it is what is expected of an architect. So I would say that a young architect who has the chance of working at the repair of ancient buildings will be having the best training possible, not only in that particular work, but as fitting him better to carry out modern buildings. Since I have had more leisure and been able to live in the country, I, as an architect, have found it impossible to refrain from building. I did not wish to employ a builder, because the work would be done too quickly. So I got a man to come, and he worked under my direction; and I assure you that while one is living on the job one thinks of and sees things that one would not otherwise. And in times to come I think the architect will practise rather differently from what he has been used to in the past. As regards our present subject, why does my Society object to "Restoration"—i.e. the reproduction of ancient features? Why should it not be done? I discussed this question with a lady, but for a long time without making any impression on her. Then I said, "Suppose you went into Bond Street and bought a Paris hat, and the salesman sent you home a copy of it, would you be satisfied?" She said, "I should at once know that it was not the original, and I see what you mean." I told her that a work of art is a work of creation; you cannot have art without creation. But is a copy a creation? No. From having seen hundreds of restored churches, I say the more they are restored, the more sickening they are. To my mind, there is no interest in a traceried window which is a copy; it is deadly dull, and even offensive. If you admit that, you have got to face the matter of what must be done. In spite of the view of my friend Mr. Peers, I say it is of no use to replace ancient work by new work and imagine it is right. I know I am slightly misrepresenting him, but it comes to pretty much the same thing. I wish Mr. Forsyth had shown us a slide of St. John's garden front, Oxford, as repaired. You know the stone goes badly in Oxford. Some stones decay very

slightly, others go a long way back. Mr. Peers said the right course was to put in new stone in place of decayed stone. If St. John's front struck any note in you as it originally was, I defy you to feel your senses stirred in like manner by the building if all the decayed stone had been replaced by new stone. If you are content to have an entirely new stone front there, well and good, if it satisfies you. But I do not think the world at large will be satisfied. If you find the stone has decayed for three or four inches, and you cut the rest of the stone out, you are injuring the wall unnecessarily, because within half an inch of where it is decayed you have sound stone. And why remove the sound stone? By cutting the decayed face back and building up with layers of tile, you are doing the least amount of destruction to the old wall, the least falsification, and the result is more harmonious: certainly you have better preserved the spirit of the building. Another point is, that if you are using tiles in this manner you have so many opportunities of wedging up open joints and beds and fissures in stone, and it is done quickly, and the process is cheaper than the other. Another thing is that if you have mortar which is more than $\frac{3}{4}$ -inch thick, it will not make a hard-set mortar. But if you are working in the way I say, you drive your tile into the mortar, and that thins the mortar and wedges it up, and you produce a good result. Of course the tiles are laid horizontally just as bricks are used. It must not be forgotten that stone will decay, but tiles will not decay. I could speak on this subject for any length of time, but I will now conclude by seconding the vote of thanks to Mr. Forsyth for his excellent Paper.

THE CHAIRMAN, calling upon Sir Francis Fox, reminded the Meeting that Sir Francis was appearing before them for the first time as an Honorary Associate of the Institute.

SIR FRANCIS FOX, M.Inst.C.E. [*Hon. A.*]: At this late hour I must not keep you more than a minute or two. First of all, allow me to thank you sincerely for the honour you have conferred upon me, because I am one of the nine or ten engineers who have been enrolled Honorary Associates. It is an honour which I very much appreciate, especially as I think it is an expression of approval of the work which I have had to carry out. I would place on record, if it is not already in your papers, a word about grouting by pressure, which has been recently introduced. The great thing is not to put the cart before the horse. I have seen lamentable results of underpinning buildings before the superstructure has been strengthened. Therefore, the proper sequence of operations is, first of all, to timber the building up to prevent its actual collapse; secondly, to grout it up by blowing out the dust with high-pressure air, to blow out the rats' nests and the owls and the martins, and the mice and the spiders, and everything of

that kind, and wetting the work well. Then grout it up. And after that, if you wish to do so, underpin. I have found very often that if you grout the building, although it has a bad foundation, you will avoid the necessity of underpinning afterwards; you are distributing the weight of the building over a much greater area. A word about telltales. The material for making the telltales should be two parts of good Portland cement to one of fine plaster. On a certain building we have recently put 2,500 telltales, and 1,500 of them have cracked. I am told that the cracking is due to the drying of the cement. I would say it is nothing of the kind, because if there is a fracture running down a wall, and we put cement telltales across and they break, we put some cement telltales away from the crack on the solid stone, and in not one of those instances have they ruptured. Plaster of Paris I do not advise. It is said that it is dangerous to rely on a single man for this work. I agree, and therefore I think there is much to be said for the American system of always associating an architect and an engineer together in the carrying out of any great work. There are certain things which the engineer can do better than the architect, and there are things which can be better done by the architect than by the engineer. But together they make a very good pair.

MR. C. R. PEERS, F.S.A., Inspector of Ancient Monuments: I am delighted at this opportunity of saying a word, as I have had a long and interesting conversation all through the dinner time with Mr. Turner. We began by holding our own points of view, and we finished by holding them more strongly still. In spite of everything he said, I shall continue to be an entire heretic. I will begin at the beginning. We are considering here to-night the question of the repair of ancient buildings, and Mr. Forsyth has laid down certain fundamental principles. He said that there should be independent and sufficient repair. Of course, we can agree that any repair shall be sufficient, but that is only begging the question, because we have various ideas as to what sufficiency means. As to independence, I am afraid I do not agree. It is the last thing any repair should be. The harm which has been done in these matters in this country has been done by the independent repairer. You have seen a specimen of it in the case of the interesting Hertfordshire church. If we are to begin with fundamental principles we must begin in this way. Take an ancient building—whether in ruins or whether in use it does not matter. You must secure its permanent preservation as far as your skill and its materials will allow. There are two things to be considered. You must not impair the historic interest of the building; it must, as far as possible, tell you afterwards everything that it could tell you before. And you must also consider the æsthetic side; anything which you do to preserve the history must per-

manently injure the appearance of the building—I say “permanently” advisedly. These are the respective provinces of the antiquary and the artist—or the architect, for artist and architect are one in this matter. When a building is in need of repair it is in a bad way, and something must be done to it. Anything which you do will, to a certain extent, destroy the building’s history; it must do. An old building which has been neglected for years may be roofless, its joints will be bad, and you will have to take away the old decayed mortar and reset certain stones. In so far as you do that, you alter the character of the building. If you think that you should leave such a building alone until it tumbles down, well and good; we are not arguing on that side; we are speaking of preserving. And if our efforts seem to be brutal, we have to consider why we are making them. Various methods have been advocated to-night, and several of them I would have liked to speak about if there had been time. There is a great distinction between buildings which are still occupied and buildings which are ruins. Buildings which are in use are still adding to their history; they are alive. Buildings which are in ruin are dead; their history is ended. There is all the difference in the world in their treatment. When a building is a ruin, you must do your best to preserve all that is left of it by every means in your power—by pointing, and grouting. Your course in regard to this is clear. When, however, you come to a building which is being used as a dwelling-house, or a church, or whatever it is, you have a different set of problems. You have to perpetuate it as a living building, one adapted to the use of the present generation, but which has a history to be preserved. I should be the last to advocate the destruction of history, but a building which is still fulfilling a purpose has a right to add to its history so long as good and noble materials are used; it is sheer sentimentality to say it has not. Recently I went down to Tattershall, where Mr. Weir has done some good work in making the building habitable. He has re-roofed the castle and put in floors, and where the windows had lost their tracery he has put in new stone tracery; and he is right. People may say he is falsifying evidence, for a hundred years hence someone may say “Look at those fifteenth-century windows.” But you cannot legislate for Tom Fool. If a man does not understand the difference between fifteenth-century and twentieth-century windows, it is his own look-out. Mr. Weir has used stone of lasting quality, and it is very good work and very beautiful. He has done one thing which I do not agree with, and that is that where he had to house certain saddle-bars in the broken stone jambs, he has made the jambs good in cement. Now what we do at present is nothing but a palliative. The great enemy which we have to fight is stone decay, and we do not know

how to fight it. Consequently, we put in new stone or cement; we do so because we cannot preserve the life of the old stone. When we know how to preserve stone, all these expedients will be unnecessary. In the case of St. John's, Oxford, Mr. Turner says we must not shock modern susceptibilities by putting in new stone in the old weathered front. But will you allow modern susceptibilities to stand in the way of use for future generations? In fifty years' time your new stone will look nearly as good as the other, and the building will still be a stone building, as it was meant to be; your cement and tiles will not improve in looks and will perpetuate no history whatever. You must be honest and courageous. You will find a lot of people ready to call you a vandal and to say that you are not worthy to touch these buildings; but you must risk that—it would be moral cowardice not to. Do not touch a single stone that you can help, but where there is decay which can no longer be safely let alone put materials back as far as you can in the way you found them. Take as an example Westminster Abbey; there is hardly a single original stone on the outside, but Westminster Abbey is still a stone building. If its past surveyors had held Mr. Turner's views, it would probably have been all tiles and cement by now. You will remember Augustus Caesar's boast that he found Rome a city of brick and left it a city of marble. Mr. Turner's school would find London a city of stone and leave it a city of tiles and cement. Never use base materials if you can help it, and do not be afraid that your repairs will deceive future ages. Ancient repairs, done without afterthought or self-consciousness, do not mislead us to-day; our own repairs, honestly done, with the knowledge of the antiquary and in the spirit of the artist, will not destroy the history and meaning of a building for those who have eyes to see.

THE CHAIRMAN: I should like from the chair to tender the thanks of the Institute to Mr. Earle for his invitation to members to inspect the work being carried out by his Department. The privilege will be much appreciated by members. I am not prepared to add anything to the discussion myself, but I do not want to sit down without personally thanking Mr. Forsyth for his Paper. It is a matter of very great credit that he should have collected these photographs showing the condition of the old buildings and their appearance after restoration. One point I should like to mention is that when people have to carry out restorations on a building, it is not necessary that they should look at it from the æsthetic point of view entirely. Whatever has been put into a building is part of the history of the building, and in ninety-nine cases out of a hundred the history should be left intact. I have one striking example in my mind at present, in the chapel of one of our

colleges, which some forty or fifty years ago was richly adorned with Grinling Gibbons panelling. Unfortunately, the eminent architect who was entrusted to carry out certain decorations destroyed the history of that chapel by removing this carving and putting in his own Gothic work instead. I do not care whether it is Grinling Gibbons or common work, it goes to make up the history of the building, and should be left alone in the interests of the building.

MR. FORSYTH, responding to the vote of thanks, said: My reply will be quite brief, and I will begin by expressing my sorrow that we do not part in any better agreement than I had foreseen. I was hoping that by starting a few of the hares to-night we might have caught some. The more we talk, the less we get towards the unification as to what is most desirable. We are all delighted to see Mr. Earle here; I think it a great honour to myself that he should be here to propose the vote of thanks. I was glad to hear him say his Department had had no protests; I can supply him with some, if he likes. (**MR. EARLE:** By all means send them along.) I am so interested in the work they are doing that I do not want to create disturbance in the Office of Works. I have made some criticisms to which one member in particular in the Office of Works has taken exception. It is not because I think there are no deficiencies in that Office; but I believe that for all these buildings, which were originally erected as separate buildings, with no connection with one another, to be put under a system of official repair will produce some unfortunate results, unless, as I hinted, we seize upon the right course now, and give them independent treatment. The building I referred to in France is St. Etienne, Beauvais. It is very interesting to learn that a change of ideas in regard to this matter is likely to arise in France. I cordially echo the words of our Chairman about the invitation of Mr. Earle to visit any buildings being repaired. We shall never arrive at an agreement on this matter until we see what other people are doing. Latterly the Office of Works has done splendid service. I have ventured to criticise, from time to time, some over-repairs which I have seen taking place, and I want to do it in as friendly a manner as possible; and any future remarks I may have to make I will in future submit to Mr. Earle. I have not seen the instructions which they issue to workmen; if we could have some on the Institute table it would be very useful. Mr. Turner raised a very good point in saying that all people who worked at ancient buildings were induced to produce better modern architecture. I will read a short paragraph which I received from a great church repairer, Mr. Gaymer, of North Walsham: "I do not know if I am right, but it seems to me before we repair we must enter into the spirit of that which has been decayed. And just as the artistic sense was expressed in the work, so in the same

sense will it be stirred in trying to lengthen the life of the work which if not repaired would be lost ; and it is a stimulus to go and do likewise." We want to maintain that stimulus, and that is what Mr. Turner meant when he said that the experience on works of repair induced one to design good work. I referred in my Paper to independent treatment, and Mr. Peers has touched upon it. I meant all buildings were to have separate treatment ; I did not hint by whom or for whom. Our Institute issues these regulations to architects, and the Office of Works issues regulations to builders, but I think they are not entirely applicable to all the works in this country. By "independent" I mean local, as much as separate. The only point on which I seriously disagree with the Office of Works is that they are inclined to anticipate repairs ; and one of the cases which Mr. Lionel Earle mentioned was a case in point ; it is not entirely in his Department—in fact, it was put into another Department. I saw some destruction going on at an ancient building. Some pointing which was sound was being cut out to grout a hollow wall. There had been settlements in these hollow walls, but they were quiescent, and no movement was taking place. I considered that the disturbance of that old pointing, which was sound, and the attempt to fill in the hollow places in the wall, was undesirable and unnecessary. Though Mr. Peers thinks the history of a ruin is ended, the æsthetic interest of it is not ended ; as we both say, they want a handling distinct from that of an inhabited building. And while we are making confessions, I will return to the Office of Works. I have seen their repair of a ruin which has been soundly and thoroughly undertaken ; in fact, it was too well done, because it looks like a new ruin. But I do not wish to discourage what they are doing in any way ; I hope they will go on doing as they are. Mr. Peers had his sling at the tiles, and I must have my sling at the ruins. It is not so much whether we want to put tracery back to old windows, so long as we have the principle that all repairs shall be self-expressive. Tattershall has been mentioned, and I suggest that we invite Mr. Weir, or Lord Curzon himself, to give us an account of what has been done there.

MR. LAWRENCE WEAVER [*Hon. A.*] sends the following comments :—

(1) I am doubtful if a diocesan scheme for supervising the repair and alteration of churches would effect what Mr. Forsyth desires. The unit

seems to be too small, and it is doubtful if each diocese would yield enough antiquaries of adequate experience to serve as an efficient advisory committee. While it may be true that the memorial character of structural alterations and decorative additions may sometimes impede repair, it often works the other way. There are many examples in which a bequest for memorial purposes of money for, say, an enlarged chancel, has brought about the destruction of old work and the substitution of new, which was not needed for the convenience of the congregation or the better ordering of worship.

(2) Mr. Forsyth did not mention that Mr. C. R. Peers, as the Inspector of Ancient Monuments, will be assisted from the 1st January next by three assistant inspectors, and the staff of H.M. Office of Works will therefore be far better able to cope with the increasing number of buildings coming into their charge.

(3) Mr. Forsyth pleads very rightly for a revision of the Institute's *Conservation of Ancient Monuments*, which is certainly out of date. He also refers to the revision now proceeding by the Society for the Protection of Ancient Buildings of its *Notes on the Repair of Buildings*. He expresses the hope that the latter will become a standard work. May I suggest that the Institute's Recommendations also should not fall short of the claim of being standard ? Surely it will lead to confusion to have two standard publications ! Would it not be possible for the Institute to propose to the S.P.A.B. a participation in their labours of revision so that a standard work upon repair might be issued jointly, and bear the *imprimatur* both of the Institute and of the Society ?

(4) All antiquaries must find themselves in hearty agreement with Mr. Forsyth's claim that enlargements of fabrics shall be honest and not imitative. Archaeology has become a fashion for amateurs. The zeal of the collector has extended from furniture not only to the features of rooms, such as mantelpieces, panelling, &c., but onwards to complete rooms. Only too often one finds historical houses to which complete rooms, snatched from another old house, have been added, and with such unpleasant skill that the forgery is revealed only by the distorted and unhistorical plan. This passion for the "faking" of buildings seems to have an element of vulgarity worse in its way than the destroying zeal of the Gothic Revival. The activities of the latter were at least obvious. The misplaced ingenuity of the latest methods are more dangerous, in that they poison the wells of architectural history.

THE OUTLOOK OF ARCHITECTURE.

THE President of the Institute, in his Opening Address of 3rd November, published in the *JOURNAL* for 8th November, took "stock of the situation" in the modern practice of architecture in terms that call for careful consideration. Mr. Blomfield remarks with force on the necessary continuity of architectural development, and on the futility of attempts to create new styles by independent effort, or by sudden break with the past.

So far I am in hearty agreement. But three points in the Address seem to me open to question, and I venture briefly to discuss them.

Mr. Blomfield appears to hold that the architecture of the Renaissance is based on tradition reaching back to Classic times, that its forms are suited to modern needs, and that it manifests, in a pre-eminent degree, the qualities of rhythm and proportion. Therefore he maintains, as I understand him, that this architecture supplies the proper guiding principles for modern practice, and that architects should pull together in effort to re-establish these principles, which have, unhappily he thinks, been lost sight of since the eighteenth century.

But he holds, also, that mediæval art is not to be ignored, that "the wise artist has to note" the various phases of this art, and, "in spite of their different idioms, he may find a certain bond of kinship in their constant effort after simplicity of statement, and even the most ardent Classicist may learn a lesson from the elasticity and resourcefulness of Gothic."

Again, he holds that the modern architect must be modern, and must keep abreast of modern requirements and modern methods. The new uses of steel and concrete will, he thinks, materially modify architectural design, but this modification must work itself out naturally, and gradually, since no true developments can be brought about by sudden effort.

It appears to me that these several sources of influence are too diverse and discordant to work together in creative design. I do not see how the principles of the Renaissance, of the Middle Ages, and of the American skyscraper, can be reconciled so as to set modern architecture moving on consistent lines. I think that such a combination involves a good deal of that eclecticism which Mr. Blomfield particularly disavows, and from which architecture has so deplorably suffered in modern times.

Let us briefly consider these propositions in their order.

Mr. Blomfield commends "those who through good report and evil steadily pursued our national tradition of Classic architecture," and remarks that "no serious advance is to be made by turning our back on the immediate past." But if, on examination, it be found that the art of the im-

mediate past has been off the track of both national and sound tradition, as it seems to me that it has, then clearly it behoves us to turn the back on it. I do not think it can be shown that the Neo-Classic architecture of England—the architecture of Whitehall, of St. Paul's Cathedral, of Greenwich Hospital, or of Somerset House—is based on national tradition, or that it is a "vernacular style." It appears to me that it marks a break with English tradition, that it is an exotic foreign to English ideas, and unsuited to English needs. If this be so, then certainly there can be no hopeful advance until our misdirected steps are retraced to the point where wandering began.

As to the question whether the architecture of the Renaissance is based on Classic tradition, ideas may differ according to what is understood by Classic. If we mean by Classic art the pure art of Greece, we must admit that a radical break with Classic tradition was made by the imperial Roman architects. For the order which the Greeks used structurally was employed by the Romans ornamentally, without structural function, and in such a way as to contradict the true Roman structural forms. The art of the Renaissance follows the imperial Roman art in its irrational combination of structural and ornamental elements; thus it manifests no continuity of principles from the Classic art of Greece. The architects of the Renaissance had no knowledge of Greek art. Their notions were derived from the ancient art of Rome, and it was this art only that they professed to revive. But the art of the Renaissance is not based even on Roman tradition. The Italian designers of the fifteenth and sixteenth centuries used the orders, indeed, in the superficial ornamental way of the Romans; but this is not enough to establish an architectural filiation. Mr. Blomfield has truly said that ornamental details do not constitute a style of architecture. He speaks of a generation of architects who have "grown up no longer content with odds and ends of detail, however picturesque, but anxious to get to the heart of things, and to grasp the informing spirit of Neo-Classic architecture;" and he explains that this informing spirit is found in "the technique of the art in its widest sense, not only in the nuances of detail, but in the larger aspects of planning and composition, rhythm and proportion." In so far as these larger aspects grow out of construction, there is little in the architecture of the Renaissance that can be traced back to imperial Roman art. Compare the dome of St. Peter's with that of the Pantheon, or compare St. Paul's Cathedral with the Basilica of Maxentius. In point of construction the Roman works are simple, straightforward, and safe, while those of the Renaissance are complex, tortuous, and insecure. It would be hard, in any form of building, to find any "successive steps of development of construction" leading from the Roman works to those of the Renaissance. The builders

of the Renaissance took little account of Roman principles of construction. What they saw in Roman art was superficial—the ornamental covering of misapplied orders, and other unessential details. As I have elsewhere said,* they were sculptors and painters, rather than constructors. In construction they based their practice on the mediæval traditions of Italy, but sought, at the same time, to realise ambitious schemes that sometimes led to the adoption of vicious methods for which no justification can be found in any tradition. No one will deny that the architecture of the early Renaissance manifests much beauty of rhythm and proportion; but in the later, or more distinctly Neo-Classic art, these qualities are of a mechanical sort based on artificial formulas.

Neither the architects of the Renaissance, nor those of modern times, appear enough to realise that the chief merit of Roman architecture lies in construction. The Roman uses of arch and vault opened a new path in construction, and the first true architectural development that followed appears in the noble Byzantine style—where the column, with its base and capital, is rationally transformed and adapted to an arched system of construction, as it never was by the Romans. Then, in fullness of time, when conditions had ripened in Western Europe, came the organic Romanesque that gave rise to the Gothic style. In logic of construction, and in ornament that does no violence to structural forms, these two styles agree with the classic Greek from which in other respects they are so widely different. Thus from the point of view of logic in design and construction, without which, it appears to me, no good architecture is possible, the true current of tradition runs along the path on which the Greek, the Byzantine, and the Gothic styles are the great landmarks.

As to mediæval art, I do not see what "lesson from the elasticity and resourcefulness of Gothic" can be found applicable to design on Neo-Classic principles. If modern design is to proceed on Neo-Classic lines it seems to me that the less the architect has to do with Gothic art the better.

I may say here that I think no better of the so-called Gothic Revival than Mr. Blomfield does. Good art never has been, and never can be, brought about by revival movements. Such art arises out of conditions that cannot be produced at will. The architecture of the Middle Ages is a natural expression of mediæval ideas, needs, and resources, and all effort to produce such architecture under other conditions must be futile. There may be mechanical copying of Gothic forms, but no living art can be retrospective. Any art of modern times that has any real kinship with Gothic will necessarily take a different form.

Mr. Blomfield remarks somewhat disparagingly on mediæval builders, asking if it be not an "his-

torical fact that many of them built extremely badly," and saying of Beauvais that it "failed almost at once, and had to be precariously maintained by a network of iron bars." It is true that we have in the very exceptional choir of Beauvais a hazardous scheme owing to its exaggerated scale, and more particularly its immoderate altitude; and in carrying out this scheme there appears to have been some careless workmanship. Thus it was not long before signs of weakness appeared, and the system had to be strengthened, not by iron bars, but by the addition of intermediate piers, and intermediate transverse ribs—converting the original quadripartite vaulting into vaulting of sexpartite form. With this reinforcement the stupendous monument has come down to our day a magnificent example of structural skill, though not of that moderation that had characterised the previous French Gothic art. The inordinately tall buttresses have, as a measure of precaution, been steadied by a rod of iron connecting each outer member with the middle one corresponding to it, and this again with the pier buttress; and by a rod from one to another of the outer pinnacles. This hardly constitutes a "network of iron bars." It should be understood, too, that there is no strain on these rods. The stability of the structure does not depend on them, save in so far as they guard against chances of disturbance from exceptional causes—as sudden vibration in cases of earthquake.

Notwithstanding the folly of its builders in carrying the work so high, and such lack of thoroughness in execution as they may have been guilty of, the choir of Beauvais has stood now for the better part of a thousand years, and is, I believe, safe for a long time to come. There need not be much complaint on the score of insecurity in a building with such a record. As compared, in point of stability, with what has been regarded as the greatest architectural work of the Renaissance—the dome of St. Peter's—it is a monument of strength. The structural scheme of Beauvais is a sound one, while that of St. Peter's dome is one of inherent weakness. No excellence of workmanship could make such a thing safe. It depended from the first on embedded hoops of iron, on which the strains soon became so great that it appeared long ago that some of them had broken, and additional ones had to be applied on the outside in order to prevent collapse. The dome and its drum are now held together by numerous heavy rings and cramps of iron, on which the strains are enormous.* These facts have been overlooked by people who have spoken of inherent weakness in the Gothic system. There is no such weakness. The stability of a Gothic structure is maintained by a safe equilibrium of well-adjusted parts. Mr. Blomfield does not, it is true, affirm inherent weakness in

* *Character of Renaissance Architecture*, p. 8.

* Cf. my *Character of Renaissance Architecture*, pp. 59–63.

Gothic construction, he speaks only of bad building, but his remarks on Beauvais may seem to imply such weakness.

Touching new developments, Mr. Blomfield remarks: "The only effective source of development in architectural form must be new conditions of building," and the American skyscraper is, he thinks, "an example of a new form arising out of new necessities." As to what are called modern methods he says: "The question still remains how are we to deal with inventions such as reinforced concrete." But what are the new necessities that have given rise to the skyscraper, and what have the uses of reinforced concrete and steel construction to do with architecture? It appears to me that the skyscraper arises out of no necessities, save those of interest on investment, and that reinforced concrete and steel construction can have no place in architecture properly so called. These modern methods all pertain to the domain of engineering* in the service of an ignoble commercialism, and have been devised in the interests of haste and cheapness which such commercialism demands. I say *ignoble* commercialism, because I believe that no right commercial spirit would have that disregard for all that makes for civic well-being that is manifest in the skyscraper, which has so extensively disfigured the city of New York—a city almost unique in beauty of surroundings, that might have been made one of the most beautiful in the world. The owner of the skyscraper seeks the largest return on the smallest outlay. With the steel frame an enormous amount of space may be got on a very small plot of ground, with a minimum of expense, by carrying the building to an indefinite height which the modern lift makes it possible to reach in a few seconds of time. It may be said that the skyscraper has come to stay, and that steel and concrete cannot be eliminated from use in modern building. If that be so, let us not be deceived. It means that architecture is so far obsolete. Let things be called by their right names. If gigantic steel cages reaching into the clouds are a necessity of modern conditions, let them be built in their naked ugliness, with no pretences

* I must define what I understand by engineering, because it appears to me that it has, of late, been to some extent confounded with architecture. Engineering, I conceive, is a purely mechanical art, based on exact science. Thus the modern engineer works from science. He calculates his stresses mathematically, and employs the least amount of material that will give mechanical stability. Practical utility is the sole end of his art. Architecture, on the other hand, is a fine art, and the architect, as an artist, works from feeling and imagination in obedience to laws of which he is largely unconscious, and which transcend human science. As a constructor he is guided by tradition, custom, and intuition. He is not too sparing in the use of materials, for he seeks to satisfy the eye, as well as to meet the exigencies of stability. The history of architecture abundantly shows that the architect requires little science in the modern sense. And, consistently with his training as an artist, it is impossible, as well as useless, for him to have the scientific equipment of the engineer.

of architectural features in concrete hung on to them. They are not bettered by such extraneous adjuncts. Let the architect abdicate, and hand over building operations to the engineer, whom he is now obliged to employ. Let the cages be made as suitable for their purposes as may be, but let it be understood that the commercial barbarism out of which they arise can furnish no inspiration for noble art.

As to the duration of these steel structures, there is, I believe, grave reason for solicitude. I have heard an engineer remark that he looked for some collapses of them in the not distant future. We do not know, he said, "how long before the steel may get tired."

The application of steel and concrete to other forms of building, now so rapidly developing, is equally destructive of true architecture. For the simulated masonry construction with which the steel frame is masked makes the building a sham and a deceit, which violate every principle of both mechanical and artistic integrity. Let the architect realise that, if he would survive, his only way "to deal with" so called modern methods is to let them alone. Having broken with all noble traditions of architecture, there still lingers some tradition of good building. Let this be strenuously maintained, and by planning rationally to meet given needs—which, after all, are not very different from what they have always been—and, by excellence of straightforward construction in good materials, let modern architecture, to use Mr. Blomfield's happy phrase, find itself. It will do so if we have any sense of rhythm and proportion, and if we cultivate, in all natural ways, that sense of beauty which alone makes grateful to the eye the works of men's hands.

CHARLES H. MOORE [*Hon.A.*].

Books Received.

- An Introduction to English Church Architecture, from the Eleventh to the Sixteenth Century. By Francis Bond, M.A., F.G.S., Hon.A.M.I.B.A. With 1400 illustrations. 2 vols. 8s. 1913. Price £2 2s. net. [Humphry Milford, Oxford University Press, London.]
- The Old Halls and Manor Houses of Yorkshire, with some Examples of other Houses. By Louis Ambler, F.R.I.B.A., Architect. Illustrated by 91 plates from photographs specially taken by Horace Dan, Architect, and others, with 20 Plates of Measured Drawings and numerous illustrations in the text. 8s. Lond. 1913. Price 35s. net. [B. T. Batsford, 94 High Holborn.]
- Ancient Town Planning. By F. Haverfield. 8s. Oxford. 1913. 6s. net. [The Clarendon Press, Oxford.]
- Valuations and Compensations. A Text-Book on the Practice of Valuing Property and on Compensations in relation thereto, for the use of Architects, Surveyors, and others. By Professor Banister Fletcher. Fourth edition. Revised, rewritten and greatly enlarged, with new chapters on the Finance Act, 1909, Valuation for Rating, Mortgage, &c. By Banister Flight Fletcher, F.R.I.B.A., and Herbert Phillips Fletcher, F.R.I.B.A. 8s. Lond. 1913. Price 7s. 6d. net. [B. T. Batsford, 94 High Holborn.]
- Victoria and Albert Museum Catalogues. Department of Engraving, Illustration, and Design.—Old English Pattern Books of the Metal Trades: a Descriptive Catalogue of the Collection in the Museum. Illustrated. 8s. Lond. 1913. Price 6d. [His Majesty's Stationery Office.]



9 CONDUIT STREET, LONDON, W., 20th December 1913.

REGISTRATION: PROPOSALS OF THE COUNCIL.

To the Associates of the Royal Institute of British Architects.—

We have arranged for an informal meeting of Associates to take place at No. 9 Conduit Street for an exchange of views relative to the Council's proposals now before members of the Royal Institute. The meeting will be held in the Great Gallery on Tuesday, 30th December, at 7.30 P.M., and all Associates interested in the question are cordially invited to be present.

ROBERT ATKINSON.
G. L. ELKINGTON.
K. GAMMELL.
EDWIN GUNN.
E. STANLEY HALL.

CHRONICLE.

The London Society's Prize: Design for Improved Entrances to Broad Walk, Kensington Gardens.

This prize (the Gold Medal of the Society and £15) is offered for the best design for the improvement of the North and South Entrances to the Broad Walk of Kensington Gardens, London.

The fullest liberty is offered to competitors with regard to the alteration of existing conditions and as to the nature of the architectural and garden treatment to be proposed. The extent to which the proposals shall apply is not limited, provided that in accordance with the promoters' intentions both entrances to the Broad Walk are dealt with. It is suggested that in any case the scheme should include handsome gates. Emblematical ideas might be embodied in the sculpture, etc., such as, for example, the Progress of Queen Victoria's Reign and the Peace of King Edward's.

Drawings required.

Block plan to Ordnance scale (88 feet to 1 inch).
Plans and elevations of north and south ends showing architectural features to $\frac{1}{4}$ -inch scale.
One double elephant sheet of detail to $\frac{1}{4}$ -inch scale.
At least one perspective sketch.

All Schemes to be eligible must be delivered on or

before Wednesday, 11th March 1914, at the office of the Royal Institute, addressed to The Secretary R.I.B.A., 9 Conduit Street, Hanover Square, London, W. Each packet is to be clearly marked on the outside with the words "London Society's Prize," and the competitor's Motto must be legibly written on the outside of the packet at the right-hand lower angle.

All drawings submitted will be considered available for illustration in any publication, at the discretion of the Committee of the London Society.

Due care will be taken of all Drawings, but the London Society and the R.I.B.A. will not be responsible for any loss of or damage to them while they remain in the hands of the R.I.B.A.

Any drawings submitted by two or more competitors are not eligible for the Prize.

The award will be made at the request of the London Society by a committee appointed by the Council of the R.I.B.A.

Each set of drawings is to be submitted without the name of its author, but with a motto legibly marked on the right-hand lower angle of each mount, and is to be accompanied by a letter containing the competitor's name and address, which is to be enclosed in an envelope sealed with a blank seal, and having, on the outside, the name of the Prize competed for and the same Motto as that attached to the work submitted. The sealed envelope must be enclosed in another envelope and sent by post, directed to The Secretary R.I.B.A., No. 9 Conduit Street, Hanover Square, London, W.

The carriage of the drawings to and from the office of the Royal Institute, and all expenses incidental thereto, must be paid by the owners. Such drawings will be returned on application, on the production of a formal demand, but the Royal Institute will not incur any expense in returning them; but if no such application is made within a period to be specified at the close of the Exhibition they will be despatched to the owner's address at the owner's risk, carriage unpaid.

Architecture and Sculpture and Town Planning.

Mr. Bertram Mackennal, the Australian sculptor, discussing the subject of "Sculpture from an Imperial Standpoint" at a dinner given in his honour at the Authors' Club last week, expressed himself very hopefully as to the future of the sister arts in Australia. The chief cities of the Commonwealth seem to be specially well favoured atmospherically. A statue, or rather a bronze statue, erected in Melbourne or Sydney, whatever its art value, gains in beauty year by year, the bronze developing a very beautiful patina, quite an antique green. In London we can never secure this result. If the sculptor managed to produce it in his studio, it would not last six months when placed out of doors in this climate. "I remember," said Mr. Mackennal, "during my boyhood in Melbourne, how the Public Gardens had some fine copies of the antique

statues placed wherever one would add to the beauty of the surroundings, and how delightful they were. The statues were only in plaster, painted. In those days I did not think it at all exceptional; now I know what a delightful climate it must be that would allow a plaster statue to stand in beauty for years outdoors. How very easy for such a country to make their gardens beautiful! We must have had some men in the early days who cared for art and loved the beautiful, otherwise these statues would not have occurred, and there is still good taste directing their efforts, for in the last few years they have removed all the fences and railings from the public parks and gardens, making these exquisite gardens part of the town, instead of treating the trees and shrubs as wild animals and putting them behind bars. Think of Hyde Park without a railing; perhaps your minds immediately conceive the park covered with the prostrate bodies of our London derelicts. But Melbourne and Sydney had the same problem to solve. The Domain in Sydney in the old days, and not long ago, was a dangerous place to go through late at night, owing to the bands of larrikins who infested this spot, but a few great lights and big main walks left them no corner to skulk in. They have gone, and the Domain belongs to the people, night as well as day. I feel certain that Australia will always produce artists. The climate will breed them; and I think an untamed country—where you can see Nature nude, not covered by the obliterating fingerprints of man—has a message for the soul ready to receive it. So it is my hope, as we develop, that we may raise men who will give us great thoughts and works, imbued with the instinct of a new people in a new land. We must build up a great and noble architecture before we can expect the sister arts to exist happily. It is architecture which creates the demand for other arts. And in this art we have not yet taken the right step. The climate should dictate the style of architecture, both in our dwelling-houses and public buildings. It is a country where you require shade. There is the finger pointing to the type and style required, but it is generally unheeded except by the placing of iron verandahs along some of the streets, which only succeed in making those streets hideous; they also attract the sun and hold the heat. We shall yet develop a school of architects born in the country who will design their buildings with colonnades and loggias, and I am sure there will be great introduction of colour. It must come, and will, when the native-born begins to ask himself—Why not? What a chance Australia has with her new capital! There never has been a greater opportunity. May it be conceived with beauty as well as usefulness! Sculpture in our times, and especially in this country, appears to me in the guise of a divorced woman. Right back in civilisation, and all through the centuries, she was the happy wife of Architecture, contented to

adorn the one who supported her. I do not know who came in to spoil this perfect marriage, but I think it was due to the new great industries which grew up everywhere during the Victorian era, and the richer the world grew the less interest it took in sculpture. However, we see the result to-day, that an architect designs niches and pedestals on and about his buildings, and knows they will never be filled or occupied. Most of them were never intended to be otherwise than barren. Whenever I see these barren niches I always think the sculptor has a good case of breach of promise against the architect! May we sculptors in the future get heavy damages for this breach, or, happier still, a restitution of conjugal rights! I am glad to say that the Commonwealth of Australia intends to alter this state of affairs as far as their new building in the Strand is concerned. They have very generously voted the magnificent sum of £25,000 for the decoration of that building with mural paintings and sculpture, the work to be done by Australian artists, and I feel sure they will approach their task with full knowledge of the difficulties to be overcome and with great enthusiasm."

Daylight Illumination.

A Paper dealing with Problems in Daylight Illumination, with special reference to School Planning, was read before the Illuminating Engineering Society last Tuesday by Mr. Percy J. Waldram. Present among the audience as delegates of the Institute were Messrs. Frederic R. Farrow and George Hornblower, respectively Chairman and Hon. Secretary of the Science Standing Committee. The illumination of buildings by natural light, as obtained by forming openings in the walls and ceilings of rooms, is an operation which so materially influences the structure and the subsequent utility and value of all buildings, to say nothing of the architectural and other amenities, that it is surprising, as Mr. Waldram remarked, that rules should not have been formulated to determine the width, height, and arrangement of glass area necessary to afford adequate illumination for any given size of room. It is strange too that there should be no recognised criterion as to what constitutes adequate illumination for schools, libraries, dwelling-houses, shops, &c. The good or bad lighting of a room depends simultaneously upon at least three conditions—i.e. (a) the extent or lighting value of the outside sky; (b) the height of window head; (c) the breadth and distribution of glass. The author submitted as a basic proposition that a certain height of window head is essential to the proper lighting of a given depth of a room, whilst a certain width and distribution of glass is similarly essential to the proper lighting of a given width of room, and that both depend upon the lighting value of the unobstructed sky enjoyed by the window, verti-

cally and laterally. The fallacies of the rough rule making the glass area a certain proportion of the floor area are now generally recognised. The most important point with regard to existing recommendations is the frequently recurring suggestion that a minimum of sky must be visible from every point of a class-room. Obviously, however, this is not essential to good lighting. No one could reasonably assert that English elementary school class-rooms, constructed under the rules of the Board of Education, in towns, with an angle of obstruction by surrounding buildings of 30° , are improperly lit. Yet in such rooms one can only see the sky at the back of the room by lying down on the floor, and in no class of building with vertical lights is it customary to have such large high windows as in elementary schools. The fact that this devitalises the result of such a large amount of Continental experimental research is regrettable, but facts must be faced. Speaking of the Standing Regulations of the Board of Education, Mr. Waldram said that these are most excellent, and the lighting which they secure in new schools is often all that could be desired. But they do not recognise in their sweeping denunciation of skylights that in spite of the danger of leaking, these are of enormous lighting value, and can, and do, form a most valuable means of curing at slight expense defects in lighting quite sufficiently atrocious to demand the closing of a school. The Regulations also do not differentiate between skylights and lanterns or high dormers; and the emphatic denunciation of front lights is also, to say the least, open to question, at least in cases where the eill is fairly high and the aspect is not sunny. In conclusion the author submitted that the subject is one in which study is hampered for lack of practical data, and that the task of acquiring such data, although involving time, trouble, and expense, is one which offers rich promise of results of considerable monetary, architectural, and medical value. The Paper and discussion, together with an Appendix prepared by Dr. James Kerr containing a short history of recent German work on the Natural Lighting of Schools, will be published in the January issue of the *Illuminating Engineer*.

Building Activity in Sydney.

A Reuter telegram in the Engineering Supplement of *The Times* of the 18th inst. announces that the general prosperity and steady growth of New South Wales are strikingly demonstrated by the building operations in the metropolis. A sum of about £7,000,000 has been expended during the year on building, being an increase of £750,000 as compared with last year's figures. New buildings numbered 8,476, of which 200, including some very imposing structures, were in the city proper. There is an indication of still greater activity for next year.

Fate of the First New York "Skyscraper."

Commenting on the fact that the Tower Building, in Lower Broadway, the first skyscraper to be erected in New York City, is soon to be pulled down to make way for a more modern structure, a writer in a recent issue of the *New York Times* says: "There is something pathetic as well as distinctly American in the fact that this building, though now only twenty-four years old and illustrating a method of construction that still passes as new, should have been condemned to destruction on the ground that owing to its antiquity all its tenants have left it." It is noted that while the structure was only 120 feet high, it was the first to receive the name of "skyscraper" in New York City.

Architects' Registration.

In Mr. Hall's suggestions for the proposed new Charter [see his letter, *JOURNAL*, 6th December, pp. 103-4] the following corrections should be noted:—

Clause (1), p. 104, describing those who shall have the exclusive right to the title "Chartered Architect," should be amended in lines 8 to 10 so as to read: "all graduates in architecture of any university in the United Kingdom; all other architects who have been in practice fifteen years."

Honours and Appointments.

Mr. Ernest Newton, A.R.A., *Vice-President*, has been appointed Assessor in the Competition for the new offices for the Board of Trade, in place of the late Mr. John Belcher.

Mr. Edwin T. Hall [F.] and Mr. G. Hastwell Grayson [F.] have been appointed by the Council as the R.I.B.A. delegates at the Congress of the Royal Sanitary Institute to be held at Blackpool from the 6th to the 11th July 1914.

Count Plunkett [H.A.] has been elected a member of the Société Archéologique de France, and a Fellow of Det Kongelige Nordiske Oldskriftselskab" (the Royal Society of Northern Antiquaries) of Copenhagen.

COMPETITIONS.

Coventry Technical Institute.

Members and Licentiates of the Royal Institute of British Architects must not take part in the above Competition because the Conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

School for Defective Children, Glake Hall, Durham.

Members and Licentiates are advised that the conditions of the above competition are not in accordance with the Institute Regulations, and the Competitions Committee are in correspondence with the promoters with a view to their amendment.

THE EXAMINATIONS.

The Final: Alternative Problems in Design.

Instructions.

1. The drawings, which should be on uniform sheets of paper of not less than Imperial size, must be sent to the Secretary of the Board of Architectural Education, Royal Institute of British Architects, 9 Conduit Street, W., on or before the dates specified below.

2. Each set of drawings must be signed by the author, AND HIS NAME AND ADDRESS, and the name of the school, if any, in which the drawings have been prepared, must be attached thereto.

3. All designs, whether done in a school or not, must be accompanied by a declaration from the Student that the design is his own work and that the drawings have been wholly executed by him. In the preparation of the design the Student may profit by advice.

4. Drawings for subjects (a) are to have the shadows projected at any angle of 45° in line, monochrome, or colour. Drawings in subjects (b) are to be finished as working drawings. Lettering on all drawings must be in a clear scholarly character.

Subject XIII.

(a) A large Fireplace in the Main Reception Room of a Town Hall.

Drawings required.—Detail drawings to $\frac{1}{2}$ -inch scale. Important details to 1-inch scale.

(b) A Single-Span Foot Bridge over a Stream 40 feet wide, in any material that the candidate may select.

Drawings required.—Detail drawings to $\frac{1}{2}$ -inch scale. Important details to 1-inch scale.

Subject XIV.

(a) Council Offices for a Small Town on an open Site. The cost of the building not to exceed £15,000.

Drawings required.— $\frac{1}{2}$ -inch scale and $\frac{1}{4}$ -inch.

(b) Completion of a Tower by a Lead Spire. The tower is 24 feet square outside measurement, 60 feet high to top of parapet. (Cornice and parapet not existing, but to be provided.) There is a newel staircase in the centre of one side of the tower.

Drawings required.— $\frac{1}{2}$ -inch scale and $\frac{1}{4}$ -inch.

Subject XV.

(a) A Museum (detached) in the Park of a Country Town. The cost of the building not to exceed £15,000.

Drawings required.— $\frac{1}{2}$ -inch scale and $\frac{1}{4}$ -inch.

(b) An Open Timber Roof to a School Hall, span 45 feet. The Hall is 80 feet long. One bay only to be shown.

Drawings required.— $\frac{1}{2}$ -inch and important details to 1-inch scale.

Dates for Submission of Designs in 1914.

	Subject XIII.	Subject XIV.	Subject XV.
United Kingdom	28th Feb.	30th April	30th June
Johannesburg	30th April	30th April	31st Aug.
Melbourne	30th May	31st July	30th Sept.
Sydney	30th May	31st July	30th Sept.
Toronto	31st March	30th May	31st July

MINUTES. IV.

At the Fourth General Meeting (Ordinary), held Monday, 15th December 1913, at 8 p.m.—Mr. George Hubbard, F.S.A., *Vice-President*, in the Chair; 30 Fellows (including 8 members of the Council), 40 Associates, 9 Licentiates, 2 Hon. Associates, and numerous visitors—the Minutes of the General Meeting (Business), held Monday, 1st December, having been published in the JOURNAL, were taken as read and signed as correct.

The following Members and Licentiates attending for the first time since their election were formally admitted by the Chairman, viz.: Leonard William Barnard, *Fellow*; John Charles Rogers and Geoffrey Ronald Gilbertson Topham, *Associates*; Frederick Arthur Huntley and Edward A. B. Hay, *Licentiates*; and Sir Francis Fox, M.Inst.C.E., *Hon. Associate*.

The Secretary announced that the following candidates, being found eligible and qualified according to the Charter and By-laws, had been nominated for election, viz.: As FELLOWS: David McLeod Craik [A. 1900], Ernest Outram Cummins* [A. 1895], Emanuel Vincent Harris [A. 1900], Henry James Wise [A. 1895]. As HON FELLOW: Viscount Milner, G.C.B.

On the motion of the Chairman, seconded by Mr. Wm. Woodward [F.], Chairman of the Finance Committee, it was

RESOLVED, that this Meeting hereby confirms the Resolution passed at the General Meeting of the 1st December, viz.:—

"That, pending the registration under the Land Transfer Acts of the title of the Institute to the freehold and leasehold properties now vested in the Architectural Union Company, Limited, or in the Liquidator thereof, the Council of the Institute be authorised to join with the said Liquidator or otherwise in giving to the present Mortgagees such security for the sum of £4,000 owing to them as they shall reasonably require. And on the said Liquidator transferring the said properties to the Institute, the Council be authorised to execute in favour of the present Mortgagees such Mortgage as the Council shall think fit to secure the repayment of the said sum of £4,000, with interest at the rate of 4 per cent. per annum, in substitution for the said existing Mortgage.

"And that the Council be authorised to execute a second charge over the said properties in favour of the Bankers of the Institute as security or part security for the Overdraft authorised by the Resolution passed and confirmed on the 13th day of March 1911 and the 27th day of March 1911."

Mr. W. A. Forayth [F.] having read a Paper on THE REPAIR OF ANCIENT BUILDINGS, and shown a number of illustrative lantern-slides, the Paper was discussed, and, on the motion of Mr. Lionel Earle, C.B., Permanent Secretary of H.M. Office of Works, seconded by Mr. Thackeray Turner [F.], a vote of thanks was passed to the author by acclamation.

The proceedings terminated at 10.20 p.m.

* We deeply regret to announce that news has since been received of the death of Mr. Cummins.



THE CAPITOLE, TOULOUSE. (1750-53.)
Guillaume Camus, architect.

SOME ASPECTS OF FRENCH ARCHITECTURE IN THE EIGHTEENTH CENTURY.

By W. H. WARD, M.A. Cantab. [A.].

Read before the Birmingham Architectural Association 28th November, and the Northern Architectural Association 10th December 1913.

IT has been the custom of historians, whether of peoples or of their literature and art, to divide their subject into periods of growth, culmination, and decline; and it has come to be considered a sort of necessity to find decline succeeding culmination. In regard to the peoples of Antiquity, whose decaying civilisation was all but wiped out by the barbarian invasions, there is some justification for the practice, but in the case of still living peoples we should be cautious, lest, in a desire for completeness of system, we assume that the three stages must be passed through; at any rate, we should make sure that the point we fix upon as the culmination is really the top of the mountain, and not merely a shoulder of it, from which a short descent or level tract has to be crossed before the main ascent can be resumed; and, above all, we should not let our vision be distorted by a metaphor. The study of French architecture is beset with the assertions of rival writers who have felt bound to fix a date after which, according to them, the flood-gates of pedantry, or licence, or what not, have been opened, with the result that ever afterwards architecture sank deeper and deeper into the mire.

If there were any substantial agreement between these writers as to the period at which this catastrophe occurred it might be fairly plain sailing for us; but unfortunately between them they fix some dozen different dates, ranging over three or four hundred years. Those for whom three centuries of the Middle Ages sum up the whole of architecture naturally discover the seeds of decay in the Italian detail and ornament introduced about 1500; those who delight in the delicate but wayward charms of the Francis I. style see the beginnings of decadence in the severer and more systematised Classic of Henry II.'s day; those, again, whose ideal is a vernacular architecture unfettered by the use of Orders, and who find it in the age of Henry IV. and Louis XIII., see the downward slope beginning with the revival of the influence of Rome in

the seventeenth century; to others the climax is attained in the Grand Manner and the more or less pure Palladianism of the age of Louis XIV.; for these the introduction of Rococo ornament under Louis XV. is the herald of a dissolution, finally consummated—according to others—by the enfeebling draughts from Roman or Greek fountains which went to the formation of the styles of Louis XVI. and the Empire.

Since, then, there is no agreement as to the point when decline began, we may be excused for assuming provisionally that it has not definitely set in even yet, and that in the architecture of modern France there is always hope of revival, even if the conditions of the moment appear unpromising; and, looking back upon its history, we may see in it an evolutionary growth in which transformation succeeds transformation, with results sometimes more inspiring than others, but in which each stage has something to teach.

The stage which we have to consider to-night, the eighteenth century, will certainly yield much food for study. It appears at first sight to be divided into two sharply defined stages, differing *toto caelo* from each other in aims and methods. But on closer examination it will be seen that the differences between the first and second halves of the century are, in the main, superficial ones, questions of detail and decoration, and that they have this much in common, that they both rest on the solidly and slowly built up tradition of two centuries of experiment in the expression of national requirements in classical forms.

Regarded as a whole the eighteenth century carries on the tradition of the Grand Manner of the age of Louis XIV.; but in detail it is in reaction against the ideals of that age, this reaction taking one form in the so-called Louis XV. style, and a second in an opposite direction, intensified by the excesses of the first, in the so-called Louis XVI. style.

The more closely one studies eighteenth-century architecture, whether in France or in England, the more conscious one becomes of two points of similarity. On the one hand, in spite of occasional exaggerations or pedantries due to temporary fashions or to the idiosyncrasies of individual architects, an extremely high level of achievement was attained and maintained throughout it; and, on the other, a century which began with much of the bombastic extravagance and coarseness of the Barocco tradition gradually felt its way to purer, more refined forms without losing its vigour or its dignity. The high average of eighteenth-century architecture was due in large measure to the fact that the language of Classical forms and composition had become the vernacular mode of architectural expression in both countries, not merely among the élite of the profession in the capital, whose example handed on the tradition from one generation to the next, but even in humbler circles and provincial centres, among country architects and workmen.

The gradual process of refinement was the result of a revival of studies of ancient architecture at the fountain-head, provoked in part by the excesses of the Baroque school, and stimulated by new discoveries made throughout the century by the exploration of the buried cities of Campania and the ruins of Sicily, Greece, and the Levant.

The eighteenth century, then, so far from being an age of decline, was not even one in which architecture marked time, but a period rather of continuous progress, reaching, in fact, a kind of culmination; and if decline must be diagnosed somewhere it may with more justice be assigned to the succeeding period. But, lest I should lay myself open to the charge of having ignored my own danger-signals, I would add that though nineteenth-century architecture in France showed the same confusion of aims as in other countries, in the stronger hold which it maintained on the national Classical tradition it possessed a steadying force and a factor favourable to healthy revival.

To return, however, to our immediate subject. What was the state of architecture in France at the opening of the eighteenth century? The art had followed an almost unbroken

course of progressive evolution since the first introduction of Renaissance ideas about the year 1500. In this, however, the Classical element—the doctrine of the orders and all that goes with it—was merely one of at least three main influences. Interwoven with it was, on the one hand, what may be called the rationalistic ideal of making the construction and use of a building supply its architectural and decorative treatment, rejecting the more obvious elements of Classical design, though holding its essentials in a latent state, as it were; and, on the other, what may be termed the naturalistic ideal, expressed not only in the imitation of natural forms, but also in the abhorrence of rule, and uniformity, and the avoidance of horizontality.

In the web of French architecture each of these three strands becomes in turn the strongest and gives the prevailing hue to the fabric to which they all contribute their quotas. They are constant elements, each liable to recur, and so also are various national peculiarities of design of a less general nature, of which I will only instance certain types of house planning and roofing—namely, first, the quadrangular plan for a great house in town or country, with the main block at the back, wings at the sides, and an entrance screen in front; and, secondly, the high-pitched roof, with its variant, the so-called Mansard roof, and the curved pavilion roof, or square dome.

In the early part of the seventeenth century under Henry IV. and Louis XIII. it had been the rationalistic strain which had been most prominent in French architecture, but the national naturalism had expressed itself as best it could in the terms of Flemish and Roman Barocco, with its method of frequent breaks and reduplications, and its occasional perversions of Classical forms, with the object of making striking and varied effects, and of obtaining vertical emphasis. The middle of the century had brought revived Classical study, and the work of the reign of Louis XIV. had been to unify all these conflicting tendencies. Louis XIV. was known as the "Grand Monarque," the "Sun King," and these terms were no empty flatteries, for in him the absolutist monarchy and the prestige of France had reached their culmination. The royal power had triumphed over all competing forces and authorities in the State—the Huguenots and Jansenists, the guilds, municipalities, and popular assemblies, the legal and feudal aristocracies. It had reduced France to a highly centralised organisation, in which every activity, every department of life was controlled and moved by the central administration, and had raised her to be the leading Power in Europe, not merely in politics, but in ideas, manners, and arts. The same uniformity as elsewhere was imposed on the arts, by forcing all into co-operation so as to provide a suitable expression for the majesty of the monarchy.

This task of enforcing uniformity of purpose upon an army of artists of various nationalities, diverse in training and differing in aims, was carried out with great success by Charles Le Brun, who reigned supreme over the decoration—in the widest sense of the word—of the royal palaces and public buildings, till his mantle fell on the shoulders of the architect Jules Hardouin Mansart, the builder of the Dome of the Invalides and the completer of Versailles, while in garden design the centralising unifying tendencies of the age were expressed by the majestic methods of André Le Nôtre. It was, in fact, the culmination of the Grand Manner; but what I want particularly to insist upon to-night is that no decline succeeded this culmination.

In politics the monarchy reached its zenith about 1690. From that period onward corruption and incompetence in the Government and consequent disaster and discontent in the nation showed themselves in ever increasing degree for a century, and France gradually lost her pre-eminence in Europe. When the restraint of the pompous and priest-ridden Court of Louis XIV. and Madame Maintenon was withdrawn society plunged into a whirl of thoughtless frivolity and debauch. But though the monarchy and aristocracy declined, France did not. For, as the eighteenth century drew on, serious thought on social and political problems and an eagerness for reform became more and more prevalent in the nation. And this fermentation of ideas

led to the emancipation of the country from the meshes of the Ancien Régime and the creation of the new France of modern times. In the domain of architecture the artificially imposed uniformity was relaxed, and the various tendencies which it comprised were free to work themselves out to their logical results.

This relaxation of authority gave full rein to the last phase of the Barocco school, that freest, gayest, most fantastic of styles known as Rococo. It was, in the main, but a system of decoration primarily for interiors, and applied, as a rule, in France at least, with the utmost reticence to exteriors. Composition suffered no detriment; nothing of permanent value that had been acquired in two centuries of Classical tradition was lost; the Grand Manner persisted with undiminished grandeur. Thus, when Classical studies revived a few years later, they found a sound substratum to work upon, and all that was needed was to eliminate the extravagances and redundances, and to purify the forms.

The chief reason, as I have already said, for the maintenance of a high average by eighteenth-century architecture was that the Classical tradition was thoroughly assimilated by all ranks of the building profession. But there were contributory causes. One of these was the existence of families which produced architects from generation to generation, and thus accumulated and handed on experience. Thus, for instance, Jules Hardouin Mansart was the great-nephew of François Mansart, the architect of Maisons, and the grandfather of two architects of note of his own name. Further, he was the brother-in-law of Robert de Cotte, the most prominent architect of the early years of the century, and was also connected by marriage with the Gabriel family, which for no less than five generations, extending over a period of nearly two hundred years, produced architects who all did notable work. Again, there was the family of Blondel, in which an uncle and a nephew both distinguished themselves in their profession.

Another contributory cause to architectural excellence was provided by the very centralisation of the royal government, which was able to command the services of the best architects and to give scope to their talents in the building, not only of royal residences, but also of public buildings throughout the country, and thus to bring them to the notice of wealthy private employers. And yet another was the Royal Academy of Architecture, founded in the previous century, a body which counted among its numbers almost all the great names in architecture, and which, whatever the vagaries indulged in by its individual members, collectively maintained by its influence and teaching a high standard of design, and insisted on sound Classical studies.

Let us now turn in more detail to the buildings of the century which arose under these conditions, confining our attention, however, almost exclusively to secular buildings. When the century opened the younger Mansart was still alive, but since the principal work of the remaining ten years of his life consists of church architecture, such as the Chapel of Versailles, the Cathedral of Nancy, and the Dome of the Invalides, it is in the work of his younger contemporaries that we may seek the symptoms of revolt against the rigid formality of Louis XIV. canons. In the Salon d'Hercule, at Versailles, for instance, decorated by Robert de Cotte about 1710, we see in the softening of the angles of the panels, the curves of the chimney-piece, and the delicate spray-work, the desire for a free line breaking in. In the Galerie Dorée in the hôtel now occupied by the Bank of France, which was likewise decorated by de Cotte a few years later (1713-19), the enfranchisement has gone a step further. Though the relatively rigid framework of an order and entablature is retained, the lines flow and waver in varied curves, the modillions are tapered, the pedestals bellied out, and plastic forms overflow their architectural boundaries. The movement thus begun reached its climax about 1730. Strictly architectural treatment was, so far as possible, banished from interiors, and the panels and

other features assume curved forms of great variety in plan as well as in elevation. Straight lines—at any rate, horizontal lines—and rectangular shapes were avoided.

Lines flowed up, unbroken by a cornice, into a coved ceiling. A room in the Hôtel de Rohan painted by Huet, and one in the Hôtel de Soubise designed by Boffrand, illustrate these points. Plant and animal forms were used for frames and other architectural purposes, and among these the so-called "rocaille" motive prevailed, a type of ornament sometimes resembling rockwork and sometimes shell forms. In this and in many other points, particularly the abandonment of strict symmetry in favour of mere balance, as in some designs by Meissonier, the influence of Chinese art is observable. The naturalistic strain in French art was once more to the fore, as it had been in the age of Flamboyant Gothic, which the Rococo period singularly resembles in its riot of free-flowing curves and its vertical tendency. It was again to manifest itself in our day in a far more objectionable manner in the so-called "Art Nouveau."

Many people have waxed eloquent on the iniquities of the Rococo, that dissolute art as it has been termed. But this severity seems to me misplaced in judging what was, after all, an ephemeral phase of glittering drawing-room decoration well suited to the age of the "salon" when social intercourse was reduced to a fine art.

Meanwhile architecture, or at any rate the architecture which counts, went calmly on its way, retaining its admirable proportions, its fine balancing of masses, its well designed orders and Classical detail. The only trace it bears of the prevailing fashion is, so to say, in the fringes of its garments; a keyblock, a vase, a console, a carved panel, a wrought-iron balcony or grill here and there enliven façades that otherwise might be almost grim in their severity. Designers of plate, furniture, and panelling might indulge in architectural fantasias, such as Meissonier's design for a garden grotto, probably never seriously intended for execution. Here and there Rococo ornament might overflow a whole feature, as in a *porte-cochère* at Laon, but never in France did architecture become an



OVAL SALOON IN HÔTEL DE SOUBISE (ARCHIVES NATIONALES). 1735.
Germain Boffrand, architect.



No. 102 RUE DU BAC, PARIS. (c. 1733).

art of confectionery such as some contemporary German examples exhibit, as, for instance, the Zwinger at Dresden. Such playful decoration is wedded with charming effect, even with serious composition, such as some of the great private mansions of Paris, the Hôtel Biron and the Hôtel Matignon, for instance. Their elevations are models difficult to beat for breadth of treatment, though they exhibit a feature hardly found up to that time in France in canted projections. It was a period when great progress was being made in domestic planning as regards convenience of internal inter-communication and sanitation, and the experiments in this direction and in that of variety are often carried out under the influence of that love for curved forms which characterised contemporary decoration. Hence the rooms with quadrant angles in the Hôtel Biron, and the elliptical court of the Hôtel d'Amelot by Boffrand, whereby a form of great beauty is obtained without any sacrifice of convenience. As other examples of Louis Quinze designs, in each case comprising town planning of a high order of merit, I may mention the "place" at Bordeaux designed by Jacques Gabriel in 1730, and those of Nancy and Toulouse, the work respectively of Héré and Cammas, built between 1750 and 1760; and the great stable buildings at Chantilly built between 1719 and 1735 under Aubert, in which last, in view of their colossal scale, the delicate Rococo decoration appears hardly to be a happy concomitant.

These examples are, I think, sufficient to substantiate the claim I made for the architecture of the first half of the eighteenth century, that under the passing fashion of Rococo ornament composition showed no decline, and the Classical tradition persisted with unabated vigour.

Yet among serious thinkers on architectural subjects it was felt that all was not well; that there was too much licence of curve and broken line and contorted ornament, too many redundances. About this time there passed over Western Europe a wave of revived interest in Classical antiquity, greatly stimulated by the discovery of Pompeii and Herculaneum. A bevy of eager explorers set forth to study at first hand the Hellenic monuments in Italy, Sicily, Greece, and Asia Minor, and the Roman monuments scattered throughout the empire. This

study showed that much of contemporary Classical practice in architecture was clogged with an overgrowth of unclassical traditions, to dispel which a reference to the sources was necessary. As illustrating this, it may be mentioned that the French students who were sent to study in



THE HOUSE, BORDEAUX. (c. 1735.)
Jacques-Jules Gabriel, architect.

Rome had fallen into the habit of devoting their attention to the works of Bernini and his school rather than to the ancient monuments.

Another influence that contributed to bring about a change of taste was that of the

writings of J. J. Rousseau, who advocated as a remedy for the artificiality and corruption of society a return to nature, open-air life, and manual labour, and held up to admiration the primitive virtues of the republics of antiquity. It became fashionable to be virtuous and live



FAÇADE OF SAINT-SULPICE, PARIS. (1733-45.)
Jean Nicolas Serrandony, architect.

the simple life. Rococo art was to be abandoned with the dissolute past. Virtue was to be symbolised in architecture by severe Classicism and rectilinear design. Ornamental motives were borrowed from agricultural pursuits and the handicrafts, while the naturalistic garden "à l'anglaise" began to supersede the formal style of Le Nôtre.

The first result of these various influences began to appear in the thirties of the century—the very period when the Rococo fashion was at its height—though the change of style did not become general till about twenty years later. In this connection a caution is needed about the nomenclature of styles. The styles of Louis XV. and Louis XVI. do not correspond in duration



ÉCOLE MILITAIRE, PARIS: CENTRAL PAVILION OF THE COURT OF HONOUR (Began 1752.)
Jacques-Ange Gabriel, architect.

with the reigns in question any more than those named after other kings. Louis XV. reigned from 1715 to 1774, while the style of Louis XV., including the transitional phase known as "Régence," began to show itself about 1710, and, after 1750, only lingered on in out-of-the-way places. Louis XVI. reigned from 1774 to 1793, but the style named after him began to make its appearance soon after 1780, and was fully established by 1790.

In 1733 Jean Nicolas Servandoni, probably a native of Lyons, who had studied the ancient monuments of Rome and the Campagna, and on his return to Paris had been employed as designer of scenery in the Opéra, startled the world by the design he submitted in competition



PALAIS DE JUSTICE, PARIS: COUR DU MAIL. Rebuilt 1776.

for the new façade of the church of St. Sulpice, which not only showed an altogether new directness, simplicity, and classical purity, but was the first to break away from the type of the Vignolan façade, with its volutes and numerous breaks, which had prevailed since the façade of

St. Gervais was built by De Brosse in 1616. It was awarded the prize, and was carried out. When compared with the design of the Rococoist Meissonnier which we saw earlier the contrast is even more startling. In 1737 another young Lyonnese, Jacques-Germain Soufflot, who was later to complete his Classical studies by an exploration of the temples of Paestum, was breaking new ground in the rebuilding of the Hôtel Dieu at Lyons, which already showed the tranquil reticence which was characteristic of the architecture of the second half of the century. Two years later, again—in 1739—the sculptor Bouchardon was following the same lines in his



PALAIS ROYAL, PARIS: COURT OF HONOUR. Rebuilt 1763-70.
Moussu-Despreux, architect.

Fontaine de Grenelle in Paris, where there is a true monumental feeling, but divested of all the declamatory emphasis which was still usual at the time.

The style of Louis XVI. was thus well on its way towards general acceptance, though by no means yet accepted by the majority of architects. For instance, the royal architect Jacques-Ange Gabriel, the last and most illustrious scion of a long line, did not show himself influenced by the new spirit till after 1750, when he was already well advanced in middle life.

The main characteristics of later eighteenth-century architecture, as compared with the earlier, are the avoidance of all but pure Classical features and pure geometrical forms, of re-duplicated and complicated features, such as broken pediments and ressauts, and a preference for straight lines over curves. In interiors the indeterminate cove and the panel with undu-

lating sides or broken angles disappear. The cornice and the rectangular panel resume their way, even when more strictly architectural treatment is not adopted. In ornament, though there is still a close study of Nature, there is just enough convention for architectural appropriateness, and natural forms are suitably enclosed and framed in. At the same time,

Pompeian motives are largely used. In sculpture, quiet poses and Classically draped robes take the place of gesticulating figures with fluttering garments.

In the third quarter of the century, apart from Soufflot, whose great work, the Panthéon, is outside the scope of this paper and stands somewhat apart from contemporary work, Jacques-Ange Gabriel is the dominating figure. His are the important palace buildings and some of the greatest public edifices of Paris. He drew up a scheme for refronting the Palace of Versailles with dignified stone elevations more in harmony with the garden façades, but involving the destruction of the more picturesque brick and stone work which we have learnt to love; of this, however, only a beginning was made in the wings that bear his name, which, in their isolation, are somewhat incongruous



GRAND THEATRE, BORDEAUX: STAIRCASE. (1773-1780.)
Victor Louis, architect.

features and insufficient to give an idea of the total effect if all had been carried out. A more complete and therefore more satisfying work of Gabriel is the remodelling, or rather the rebuilding, of the palace at Compiègne; and his masterpiece in the grand style is perhaps the Place de la Concorde, with its noble twin palaces, in which the motive of the Louvre Colonnade is

skillfully adapted, and varied to suit differing conditions and to produce a gayer, more festal effect. Another splendid work of his is the *Ecole Militaire*. As an example of the many other able architects at work in Paris at this time I will mention Antoine, who had raised himself by his study and energy from the position of a working mason to that of a contractor, and finally to a leading place in the architectural profession. His greatest work is the *Monnaie* or Mint, obtained in open competition, and he also collaborated in the rebuilding of the *Palais de Justice*.

Many of the great public buildings of this age I must of necessity pass over unnoticed, such, for example, as the Front and Galleries of the *Palais Royal* in Paris. Merely mentioning the Great Theatre of Bordeaux, by Victor Louis, as a masterpiece of axial planning, I will conclude with a few examples of domestic architecture.

First comes that gem-like masterpiece of Gabriel's, the *Petit Trianon*, almost square in plan and almost cubical in form, but raised to a high power of architectural expression by the perfection of its proportions and the delicacy and absolute appropriateness of its detail and ornament; then the courtyard of a Parisian mansion, somewhat in the manner of Gabriel, and



PALACE OF THE LEGION OF HONOUR, PARIS, FORMERLY HÔTEL DE SALM. (1782-86.)
Pierre Rousseau, architect.

exhibiting a stately treatment, enriched with orders; and, finally, a house front at Caudebec, where the rather unusual treatment of a central recess framed in pilasters and emphasised by a pediment gives interest to a simple design.

If Classicism had gone no further than the use which Gabriel made of it, all would have been well; but unfortunately in the revived enthusiasm for Classical archaeology fostered by the ideas of the revolutionary and Napoleonic eras, when everyone was striving to resuscitate the virtues and institutions, first of the ancient republics and then of the Roman Empire, together with their costumes, furniture, and decoration, many architects forgot the true ideal of the Renaissance. Instead of taking ancient architecture as an inspiration and a guide in tackling modern problems, and using Classical forms and proportions as a language in which to express modern requirements, they began to make literal copies of Classical buildings, utilising these copies as a shell within which to fit modern requirements as best they could. Some traces of this tendency are visible in the *Hôtel de Salm*, now the headquarters of the *Légion d'Honneur*, begun in 1782, where the court, surrounded by Ionic colonnades, leads us to a sort of Corinthian

temple-front pierced by a single door, behind which a two-storied house is somehow packed away. The consummation of the tendency is seen in the complete reproduction of a Classical temple in the Madeleine. But this is beyond our period, not having been begun till 1807.

The unreasonable archaeology of this school of Classical revival, however fine its results may have been from a purely monumental point of view, and the total divorce it brought about between design and utility, largely contributed to the temporary eclipse of even the saner Classical traditions amid a welter of other revivals, and its somewhat frigid and austere beauties



CHURCH OF THE MADELEINE, PARIS. (1807-12.)

Barthélemy Viguon, architect

had little chance of retaining their popularity in the face of the more picturesque charms and sentimental associations of Neo-Romanesque and Neo-Gothic. Neo-Florentine, and Neo-François Premier, which clamorously forced themselves upon the public view about the time of the fall of the Empire, and were but other symptoms of the same love for archaeology against which they were in professed reaction. But the Classicism of this archaeological revival was in the main a movement of the nineteenth century and post-revolutionary society, while French architecture of the eighteenth century and the Ancien Régime remained for the most part faithful to the traditions of the Neo-Classicism proclaimed by the Renaissance and followed by the greatest of her sons in all periods.

REVIEWS.

ENGLISH CHURCH ARCHITECTURE.

An Introduction to English Church Architecture from the Eleventh to the Sixteenth Century. By Francis Bond, M.A., F.G.S., Hon.A.R.I.B.A. With 1,400 illustrations. 2 vols. 4o. Lond. 1913. Price £2 2s. net. [Humphrey Milford, Oxford University Press.]

Not untruly might it be said at the present day that of making many handsomely illustrated books there is no end; and perhaps a publisher's reply, not necessarily for publication, might be to the effect that, for readers of to-day much study of poorly illustrated books would only tend to a weariness of the flesh, with consequent bearing on the sale. Mr. Francis Bond virtually admits something of this implied motive for sumptuous illustration in his own case when, in the preface to these two handsome volumes, he asserts that a general treatment of the subject, "especially if aided, as in these volumes, with all manner of plans, drawings, sections, and diagrams, as well as photographs, will be found at once easier to follow and more enjoyable than the unpalatable penmanship of a condensed text-book." Fully half the book, he observes, is occupied with illustrations, to which the text is subsidiary. On first glancing through these volumes, several things occur to one to say which, after a perusal of the preface, have to be left unsaid. The book, we are told, is intended not so much for professional students as for the great body of readers nowadays interested in mediæval architecture who wish to obtain some general knowledge of it, and chiefly for those with little or no previous knowledge of the subject. Hence the adoption of copious illustration, largely by photographs to a good scale. Technical terms have been eliminated where possible, and, as the author phrases it, archaeological history has been as far as possible eschewed; what has been attempted, he says, is to give a plain, straightforward account of mediæval building construction as controlled by mediæval ritual. It may be thought, perhaps, that Mr. Bond has not succeeded over well in carrying out his premeditated avoidance of archaeology, being too good an archaeologist; however, a writer is entitled to be judged by the standard he sets for himself.

This book comes as the crown of a series of works by the author, each having its own close connection with the main subject. Vast as this subject is, it counts after all as but a single branch of a subject still more vast, viz., Mediæval Architecture itself. One estimate of the relative importance of our particular branch, in a general survey of mediæval architecture, is almost amusingly, yet quite seriously, set forth in Professor Lethaby's fascinating book, *Mediæval Art*, in which—as though to curb our insular conceit—just eight pages, out of a total of some three hundred, are devoted to *Gothic Art in England*, with a few passages besides of allu-

sion and comparison. The subject of Professor Lethaby's eight pages, applying all but entirely to church building and illustrated by one little plan alone, is here presented to us by Mr. Bond in two quarto volumes of some 500 pages each with 1,400 illustrations. And this, he reminds us, is supplementary to his previous works; in fact, this work and his great volume, *Gothic Architecture in England*, with its 1,254 illustrations, are intended to be mutually complementary. The present book, replete with information as well as resplendent with illustration, is fully equipped with copious lists, notes, and references, as well as an appendix, two glossaries (English and French), and two indexes. In the course of its fourteen chapters we find the subject presented in a manner affording a comprehensive view of the entire field, and at the same time worked out in sufficient detail analytically and by dissection of selected examples to give an insight into each of the main divisions of mediæval church building-structure, with some glimpse into the world of detail. And along with this the author does not fail to include questions of directly human interest underlying it all, further considering, as he does, "not only how a church was built, but why it was built, who built it, and who served in it, who worshipped in it, and what manner of worship was theirs." What all this amounts to but to archaeological history may seem something of a conundrum to the plain man. Mr. Bond, in one of his former writings, referring to what he had aptly termed the biographical method of studying an old church, suggested that to read the biography of an individual in the order in which one usually encounters the life-story of such an organism as an old church in looking over it would give us rather a topsy-turvy view of that individual's career; for we might quite probably begin by stumbling first of all on one of the later passages in his life, then on something antecedent to that, and perhaps arrive only towards the middle of our reading on anything telling of his birth and origin. To attempt to read a building-structure by merely gazing at each aspect and feature of it just as they chance to come into vision does seem to be going at least a rather roundabout way to learn; whilst really to read and understand a single example may be going a good way towards interpreting others. With this book and the one before mentioned, the author means to leave us little excuse for ignorance as to what a mass of material for the study of the subject exists in this country; but, of course, it is a small selection only that he can give after all. As he remarks truly enough, "the treasures of our mediæval architecture are indeed inexhaustible." To view them there come to us observers from other countries in ever-increasing numbers, mingling with our own people in admiring groups. The eyes of other nations, and especially of our cousins and other kinsfolk from overseas, are upon us as custodians

of the family heirlooms. Now and again, such of them as can do so voyage forth to survey the treasures. And how, we may ask, are they to make their survey; how are they to appraise the value and grasp the significance of each piece of old building-work they meet with here; to decipher and to read it, even as a document, so as to understand it? Ask each one of ninety-nine visitors out of a hundred viewing any great church—or little one, for that matter—"Understandest thou what thou readest?" Would he not, out of his heart of hearts, reply truthfully and feelingly, "How can I, except some man should guide me"? Mr. Bond, like a true apostle, is here at hand with words of guidance and enlightenment. In the character of guide and teacher he leads us through the whole subject of mediæval church architecture in this country by a way of his own, as through a maze, following a regular thread of logical sequence. To begin with, a consideration of the numerous varieties of non-parochial churches, mostly large, and the differentiation of these varieties from one another, and from the parish church, brings us naturally to the question of their particular purposes and their diverse planning to meet requirements. Then, with the study of the planning is involved the further question of structural growth through the centuries; and especially in regard to the parish church, whose story in most instances is so strangely curious and interesting. In the case of building work covered by vaulting, the planning of this latter can hardly be thought of apart from the ground plan, neither can it be dissociated from the vital question of its own abutment. Walls, and arches, and piers, with all their various members, go to make up the complete building which, by the way, needs windows for lighting, also doors for access, with porches giving shelter. The disposition of the structure into bays, for convenient building, affects such features as the triforium and the clearstory amongst others. Lastly, the whole needs to be roofed-in, and the rain-water efficiently drained off. Towers and spires give the finish. Thus may be outlined, in briefest summary, the contents of this Introduction to English Church Architecture.

Mr. Bond, an Honorary Associate of the Institute, may be said to have approached his subject from outside the profession, like Professor Willis before him, and other bearers of honoured names linked with the study of our Mediæval Church Architecture. Whatever he may lack in the way of practical experience in the devising and directing of building operations, manifestly he suffers from no lack of close acquaintance with actual examples of building work, devised and directed by past-masters in building, lying strewn over all parts of this land of ours. From a wide field indeed he gathers in the produce, sorting it with discrimination and garnering it into his volumes as material to serve. Were this material intended to serve for the

purpose of more direct teaching it would need yet further sifting and sorting, so as to establish more intimate correspondence between illustrations and text; information of itself being, after all, but the raw material for teaching. But this is a book of reference, not a text-book; still less is it one for light reading. In fact, the author can hardly be accounted an easy writer to follow for a long sitting. So much has he to tell that his theme is constantly in danger of being overwhelmed in the profusion of examples and parallels he has at command and is ever switching-on, so to speak, as though at all costs he must be generous out of his wealth of knowledge; until, in parts, the reader may find himself longing to arrive at a summing-up of the argument, at a narration of the main story free for the moment of allusions and cross references. We are told frankly that during the years that have elapsed since he began to write on mediæval architecture the author has both learnt and unlearnt much; admission such as no writer of experience on such a subject need be ashamed to make. These two volumes are an improvement in several respects on his previous large work on the subject. Now one thread runs right through, as before observed, and the reader certainly is spared some mental gymnastics by the more straightforward treatment of the matter here adopted. Still, occasionally we meet with some apparently needless disregard of chronological sequence in the citing of examples and arrangement of illustrations. As Mr. Bond does not disdain the aid of illustrative ground plans of churches, in these two works of his, it seems a pity he should still remain content with giving so many that stop short of telling us what, as plans, they might be made to tell. Those given are very unequal in their aim and attainment; they vary from examples fairly complete in which overhead arching and vaulting may be duly indicated, though not invariably so, to mere block diagrams for explaining some particular points only. Except in the case of a plan or two, borrowed with acknowledgment, no attempt is made to distinguish different parts of a building of varying date by various hatching. To have attempted this would be stepping on the forbidden ground of historical archaeology, no doubt. Still, the general standard set by these borrowed plans might have been aimed at throughout with advantage, if teaching is to count. On the other hand, the large advance made of late years in architectural photography is warmly acknowledged by Mr. Bond, and so well does he avail himself of it that his book not only maintains a high standard throughout in this respect, but every now and then surprises us with a quite impressive picture, rising to more than just the clear presentation of fact, and conveying something of that intangible quality inherent in fine architecture which eludes the most faithful of scale-drawings, the "magic quality," as Professor Lethaby finely says, that

"touches depths of feeling and opens the gates of wonder."

The author, in his capacity as guide to beginners, leads them on the way they should go, from point to point, by paths not too rugged. For instance, with him the planning and growth of the parish church are treated together as one subject; he is not so naive as to conceive of separating for a moment the study of the ground plan of the building from the study of its historical growth; neither does he, like some would-be guides to cathedrals and other churches, adopt the system of taking the reader wandering first all about the inside of a building and then all round the outside of it, on the chance of thereby getting him to comprehend the make of the whole thing. He sets out on the right way to teach the subject by insisting on a consideration, to begin with, of underlying causes before fastening on the results. Of one possible source of confusion to the mind of the student Mr. Bond, ever practical in his aims, clears the ground by eliminating from his discourse fancy names for various stages of our mediæval building work, suffering no bad tangle of Styles or Periods to blur the view and impede progress. By this much he simplifies a subject still complicated enough for any student. For the main purpose he recognises chronology as the true historical criterion, unambiguous and unchangeable. He would remove the study from the domain of near-sighted specimen-hunters and markers of externals to that of systematic investigators into building-form as structure, building-structure developed by men who, little enough aware of the all-pervading force of living tradition under which they worked, nevertheless, having work to do, did it for the best according to their lights with the means at command, and apparently not seldom with some very human resolve to "go one better" than their predecessors' work or than their own or their rivals' latest attempt.

Those who still go on thinking of this architecture as just a business of cusps and crockets, window-tracery and arch-moulding, will find in these volumes plenty of material to their mind; they will find something more also, which, however, need not hinder their enjoyment of the features, mouldings, and ornament, so attractively displayed. But one conclusion of true educational value to-day can hardly fail to be impressed on any serious reader of these volumes, viz., that the study of building work is a technical matter, and that to be able to see through a building with the mind's-eye is, after all, an attainment to be reached only by training, not by any easy means or shortcuts to knowledge. The book, although intended, we are told, primarily for non-professional students of architecture, will be read with pleasure, and surely not without profit, by some members of our profession itself; at any rate by those of the odd remnant that, in its own dull way, humbly

ventures to deem the acquiring of a working knowledge of past accomplishment in this home-grown architecture of adventure to be no bad equipment for even the brightest of adventurers into the realms of gold dreamt of as architecture of the future.

To come now to the main substance of the book. In Chapter I. the author reminds us that ours was a land of churches, for they abounded in town and country, and in England now there remain over 10,500 (excluding chapels) of mediæval foundation. These churches were of many varieties, but the vast majority were parish churches. The remainder, as a rule, were large churches built each for the special use of one or other of the various Orders of Monks, Canons-regular, Friars or Knights, or for cathedral or collegiate foundations served by Secular Canons. Among the parish churches, a number, mostly of larger type, eventually became collegiate, i.e., served by a college of priests; whilst belonging to monastic foundations there were some small churches attached to cells. For convenience we may consider we have to deal with two main classes, the greater churches and the parish churches. Most of the churches of the Monks and Canons-regular were of great size, small as was the population of the country. They were required for an all-but continuous round of services, by day and by night, and the intrusion of lay worshippers was not generally welcomed. Parishioners, although in certain cases accommodated for worship, more often got provided for outside. The parish church of St. Margaret's, Westminster, for example, is one standing instance of this. The respective requirements of the two bodies of worshippers conflicted too much to be conveniently met in the same edifice. So, we see, the greater churches were not designed for the use of an ordinary congregation. For that purpose the parish churches were erected, also the *capella*. "The greater churches," says Mr. Bond, "were designed for quite other purposes than a modern church." To-day it seems necessary to inform people of this elementary fact. In Chapter II. the requirements of a greater mediæval church are considered in detail. These requirements, varying in each type of church, of course ruled the planning, and thus controlled the general disposition and design of the whole building. Whatever the type of church to be planned, the placing of the high altar in its sanctuary, with additional altars disposed in certain relation to it, may be regarded as the prime motive, in obedience to which other arrangements fell into place. The accommodation, in a stalled choir screened-in, of a body of members which might be large, was another governing consideration, in fact, the great special requirement; and with these two main requirements went that of a procession-path for circulation round the church from altar to altar. The western limb of the building, beyond what might

be occupied by choir stalls, was designed for various use according as it might be needed to accommodate a retro-choir and a choir of lay-brethren with their respective altars, or, in particular instances and at certain times, to serve to some extent for parishioners and others, as well as for the marshalling of the Procession at its final stage, before re-entering the choir. The satisfaction of another requirement, producing striking consequences in so many cases, lay in the provision of a Saint's Chapel for housing a shrine, and of accommodation perhaps for other shrines, to be visited by streams of pilgrims for veneration of the Relics. The multiplication of altars in itself, involving transepts and chapels in various positions, raised problems that reached far indeed; whilst upper-chambers, crypts and chantry chapels, each in their turn, made for further complexity of plan and design. It was out of the planning and re-planning, occasionally on a considerable scale, implied in reconciling the conflicting claims of these various requirements that the multiform types of such edifices were gradually evolved. Chapter III. follows out in further detail the planning of cathedral, monastic and collegiate churches. Chief amongst the points here considered is that of the eastern termination of the church, inviting comparison of the contending systems of the square and the apsidal ending, whose rivalry lay at the very root of church-planning in this country. How each system worked-out in the process of meeting requirements; how they prevailed alternately; and how they even seemed to coalesce on occasion, is all set out for us and illustrated by numerous plans and views.

Then we arrive, in Chapter IV., at what the author may well call the strange history of the growth of the English parish church, occupying over one hundred pages and comprising, as he says, the results of visits to village and town churches not less than two thousand in number. He remarks that the vast majority of our parish churches have remained unsung; they are a mine of unworked interest. Moreover, they include the earliest extant church-building in the land. Of our great conventual and cathedral churches none can show a stone above ground, declares Mr. Bond, earlier than the eleventh century; of the smaller churches, the originals of parish churches, we have remains possibly from the fourth century onwards. Certainly from the seventh century the record is clear and continuous, and altogether of pre-Conquest church-building work we still possess quite a body. With an exception or two this work, to be sure, is mainly in fragmentary condition, having somehow come down to us after running the gauntlet of all the centuries of subsequent building activity; so that much of it now survives built-up in structure of later time, and thus much may yet remain to be identified. Certain pre-Conquest building types, too, survived

the Norman Conquest and bore fruit. From the opening of the twelfth century onward the building and rebuilding of parish churches all over the country must have gone on apace, judging from the authentic work we still possess, due to the more or less direct driving-power of the great building organisers of that day, the masterful prelates and other leaders who helped to establish themselves on their recently acquired lands by stamping these, as it were, with the seal of building work in one form or other. Some eight different types of parish church plan are noted by the author as being in use during the twelfth century. No wonder that, as the following centuries passed, the development of this church plan and structure by expansion and remodelling, steadily carried on century by century, grew so complex and produced results so puzzling to the student of to-day. How it all evolved on plan, on section, and in elevation may be gathered from Mr. Bond's book, so far as a narrative of so peculiar a nature can be read from a book. It is the actual buildings themselves that need to be read one by one. The author concludes the chapter by taking the reader through a series of selected examples, illustrating how we may go about the study of the buildings. Here he brings in some diagram-plans of certain churches, a set of plans to each church, showing in what form the buildings may be supposed to have shaped themselves at successive stages of their existence; but these plans, not always in each set to the same scale, and sometimes not shown on the same or on an opposite page, have to be compared together and read by the light of the text before the plot of their story can be grasped; whereas this might, as a rule, be suggested, if not always fully conveyed, by various hatching, on a single plan, in a way perhaps better adapted for comprehension by the uninitiated.

In Chapter V. we touch actual building construction and are at once involved in the crucial problem of vaulting. This is another of Mr. Bond's big chapters, of over a hundred pages. Much building history hangs on the mason's ambition to vault, and the pursuit of this ambition had its influence even on buildings into whose structure no vaulting entered. To traverse the range of masterpieces here portrayed, from the nave of Durham, through to the Gloucester Lady Chapel, or by the naves of Exeter, Norwich, and Sherborne to that of St. George's, Windsor—to name but a handful—is to pass in review a series of works devised by human brain and wrought-out by human hands calculated, one would think, to make any member of the great confraternity of building-men hold his head a little higher at the thought of these being the work of building-men. As to this chapter, which concludes with the dissection of fifty-seven individual vaults, the author, anticipating the verdict, claims its being the fullest and most comprehensive account of English vault-

ing that has yet appeared. Systems of vault-abutment inevitably follow on, in Chapter VI., bringing into view the whole question of buttressing from the ground upwards, including both under-roof and over-roof flying buttresses, these latter producing pinnacles. After all this the interest drops just a little perhaps as we come to flint wall-facing and timber-built churches, together with walls, arches and decorative wall-arcading, in Chapter VII. Chapter VIII., on the pier and its members, goes into the design and carving of capitals, beautifully illustrated by photographs; also into the moulding of base and plinth. The lighting of churches calls for a chapter (IX.) of nearly 140 pages, running through the whole scale of pierced and traceried openings, again illustrated most effectively. Anyone concerned to advocate a high place for our English branch, amongst the various Schools of mediæval architecture, in regard to the development of fenestration might confidently rely on this chapter for adequate presentation of his case. In spite of the pronouncement in the Preface, the author's archaeological proclivities lead him to devote more than twenty pages to the subject of the "Low Side Window," one of those archaeologically interesting points, of quite minor consequence in the development of church structure, that are so constantly fastened on with eagerness by some students of church architecture, as if there were something in them really essential to the understanding of the subject as a whole. Mr. Bond goes through the ceremony of demolishing in detail thirteen distinct speculations as to the object of these little windows, and sums up favourably for the Sanctus-bell explanation.

Doorways and porches follow in Chapter X., a short chapter full of interest concerning features of real consequence in the church fabric. The subject of triforium and bay-design, treated of in Chapter XI., opens up the question of the unit on which a church was set out, disclosing how the building grew from the inside outwards, like a shell. In Chapter XII. this question is pursued up into the clearstory.

With Chapter XIII. we get to the great, final problem of all, viz., the roofing of the enclosed space, so as to make a building of it that would afford shelter from rain. And, with but very few exceptions, the roofing problem in this country was distinct from the vaulting problem. Whether the mason were called in to throw his fire-resisting vault or not, the carpenter was the man to look to for the actual roofing. What he could frame a roof over the mason might set out as the span between his walls. In the absence of a vault the carpenter could be relied on to make a finish from the wall-plate upwards. What manner of finish he did attain to may be gathered from Mr. Bond's illustrations of roofs. Truly, as he says, "it is enough to make every carpenter in the kingdom throw up his

cap in the air at the thought that he practises an art which has achieved such triumphs."

The last Chapter, XIV., is reserved for what are commonly the most striking features in the external appearance of our churches, viz., towers and spires. Again Mr. Bond rises to the occasion with a host of fine examples, well represented. His division of the chapter into two sections—I. Towers, which resolves itself into towers without spires; and II. Spires, comprising towers crowned by spires—is not very scientific; for, the fact of a tower now appearing spireless may be accidental, and so afford no good ground for classification. One might indeed be tempted to regard the spired tower as a completed design, and the other as an incomplete one; but this opens up a doubtful question, as to which it may be remarked that although lack of freestone might account for the erection of a timber spire, it is not a conclusive reason for the absence of spire. At any rate, a more workman-like distinction to have drawn would be the essential one between central towers and non-central towers of churches. Each of these classes has its own distinct origin and story to be told, the spire after all being but a form of roofing common to both.

As might be expected, the volumes are well produced, being handy for their size and clearly printed, with wide margins. The crop of misprints is small. Ledbury gets put into Hertfordshire and the chancel of Greenstead is alluded to when the nave is meant, whilst the illustration of a ringing-wheel, at Gerona, from Street's *Gothic Architecture in Spain*, appears printed upside-down, Street's monogram included.

It is impossible to attempt now to really discuss the thousand-and-one points of greatest interest raised in these chapters of Mr. Bond's. One can only commend them to the attention of students who want to learn on their own account, as well as to be told, something not only of our own national heritage in building work, but also of the art of building in general, an art that has come down to us vitalised, in its countless phases, by workers' traditions unbroken in their continuity from immemorial antiquity. To note primary motives in building and to trace their influence through the ages, observing how, as time passed, secondary motives came in and to the bare meeting of needs there got added the satisfying of wants and aspirations, is a pursuit surely not unworthy of any student of architecture. Nor is it likely to prove valueless to him if he should come to apply such line of study to the investigation not only of primitive structures, but even of those of so comparatively late a time in the history of architecture as from the eleventh to the sixteenth century.

One is irresistibly reminded of that fine passage in which the author of *The Origin of Species* proceeds to the summing up of his momentous conclusion. By the requisite mutation of a word or two, to make

the application to our case, viz., *structure* for being, *building* for nature, and *motive* for instinct, the passage might apply perfectly to the study of architecture, and would read thus—"When we no longer look at an organic *structure* as a savage looks at a ship, as something wholly beyond his comprehension; when we regard every production of *building* as one which has had a long history; when we contemplate every complex structure and *motive* as the summing up of many contrivances, each useful to the possessor, in the same way as any great mechanical invention is the summing up of the labour, the experience, the reason and even the blunders of numerous workmen; when we thus view each organic *structure*, how far more interesting—I speak from experience—does the study of *building* history become!"

WALTER MILLARD [A.].

THE SUPERVISION OF BUILDINGS.

The Clerk of Works: a Handbook on the Supervision of Building Operations. By George Metson (Licentiate), M.R.S.A. 80. Lond. 1913. Price 2s. 6d. net. [Crosby Lockwood & Son.]

Building Supervision. By George W. Grey (Licentiate), P.A.S.I. 80. Lond. 1913. Price 2s. 6d. net. [E. & F. N. Spon, Ltd.]

The subject-matter of these two books being to a very considerable extent the same, it has been found feasible to deal with them together in a single review. Mr. Metson's book is stated to be primarily written for clerks of works, and will be found a very useful text-book by the younger men of this class, and at the same time will be by no means out of place in the library of the architectural student. It deals with the supervision of building work throughout the whole of the ordinary trades in very considerable detail. So numerous are the points to which an efficient clerk of works must necessarily direct his attention that any close review of the items contained in this work is out of the question. Considering the book on broad lines it does not appear that there are many cases where any particular amplification would be desirable. But an exception to this general rule occurs in the chapter on plastering. This is written as if the only alternative methods were the use of ordinary plastering mortar and the adoption of Keene's cement, whereas of course the use of some form of patent plaster is becoming most general. Mr. Metson rightly insists on the payment of a reasonably good salary to the clerk of works. The "minimum wage" which he suggests is £3 10s. a week. This may be all right for London, but it would be considered rather high in many provincial districts. The duties of the clerk of works also extend in his view to the making of suggestions as to improvements in the management of a job, but most people will consider this to be an unwise encroachment on the domains of the general foreman.

Mr. Grey has not dealt with the question of supervision in the same detailed fashion as the

previous writer, and doubtless his book is not so valuable as a *vade mecum* and work of reference for the zealous supervisor. But if it has lost in this respect it has gained immensely in readability. Mr. Grey has approached his task with that most valuable qualification, an unaffected easy style. His shrewd remarks on the various details of constructional work show him to have the gifts of observation and analysis, and the light which he throws on the various subterfuges that are possible of adoption by an unscrupulous general foreman will probably be almost dazzling to persons of an innocent and trustful disposition. It so rarely happens that a work on a branch of the building trade combines the merits of an interesting style with the inclusion of valuable material, that a hearty welcome for this book should be assured.

HORACE CUBITT [A.].

CORRESPONDENCE.

NOTES ON TELLTALES.

To the Editor, JOURNAL R.I.B.A.—

SIR,—I was unfortunately unable to be present on the 15th December at the reading of Mr. Forsyth's interesting and erudite Paper upon the Repair of Ancient Buildings, with the greater part of which I am in entire agreement.

It is obviously of the greatest importance for those in charge of buildings, ancient or modern, to determine whether a fissure is in movement, however slight, or not.

I notice that Mr. Forsyth states that "tell-tales should be placed over the fissures," and proceeds to state that "cement telltales are apt to mislead," and that "plaster of Paris is a better material for the purpose." In this I concur with him, and should like to go a little further by stating that cement telltales should on no account be relied upon, and that plaster of Paris telltales are also apt to be misleading, and although cement is perhaps helped by being tempered with plaster it is still wholly unreliable. If the wall and the tell-tale could be kept constantly wet for some weeks, some reliance might be placed upon the latter, but obviously this is out of the question. To attach a telltale to the solid stone away from a crack, as advocated by Sir Francis Fox, in order to test the reliability of the adjoining actual telltale across the crack is unscientific and tells nothing. Such an experiment infringes one of the essential criteria laid down by John Stuart Mill in respect of the validity of inferences connecting cause and effect. Two of the initial conditions are varied, either of which may be the cause of the cracking of the tell-tale. A telltale across a fissure may crack by shrinkage owing to the fissure introducing a non-homogeneous condition in the length of the telltale. Or it may crack by the movement of the building

itself. When the telltale is attached to the solid stone, both of these causative conditions are varied by their non-existence.

It is not going too far to say that the 2,500 cement telltales introduced in St. Paul's Cathedral are one and all giving evidence which may be false and is certainly unreliable. There are very definite evidences in the building itself that this is the case. But apart from these evidences, plaster of Paris telltales, although in themselves unreliable, placed adjoining some of those in cement have not always cracked, while glass telltales similarly introduced have not cracked at all. The glass telltales are, however, only experimental, and probably ineffective to register very slight movements owing to the elasticity of the material. Where cement telltales have been relied upon elsewhere than at St. Paul's the inference to be drawn from them is probably the same.

Mr. Horace Darwin has devised a crack micrometer of great delicacy capable of detecting and recording minute movements across a fissure in three dimensions. This promises to be of great utility and is a very delicate and beautifully contrived instrument. It is safe to predict that we have not heard the last of it. Meanwhile, I would add that although it is usual to decry paper telltales—and I have been apt to do so myself—the best telltales I have seen recently were pieces of stiff paper used by a colliery company upon a building they had seriously disturbed. I have not been able to find out with what material they were fixed, but it was so well done that they have proved equally effective between stone and stone and stone and plaster for a period of two years or thereabouts. The advantage of paper is that it records differential movement in the vertical plane, whereas frequently cement or plaster (which may not perchance have cracked by shrinkage) is apt to detach itself completely under such movement from one side of the fissure.

The matter is of so much importance that when one finds well-known authorities advocating such definitely unsound devices as cement telltales in any form it is well to draw attention to the fallacy at once.

A useful experiment, devised by Mr. Darwin, may be tried with cement telltales by sawing grooves in a solid piece of stone and supposing these to be fissures. In order to obtain the proper condition the stone should be placed in a vertical position when it is wetted and the telltale is attached. The wetting should, of course, only be on the surface. Success in preventing the telltales from sometimes cracking seems to depend upon the amount of water used, and so doubtful a factor in the hands of the British workman is sufficient to destroy the reliability of the method. Hair cracks only, of course, take place in cement owing to the shrinkage of the material. If wide cracks occur, the deduction will be different.—Yours faithfully,

W. D. CARÖE, F.S.A. [F.]

THE REPAIR OF ANCIENT BUILDINGS.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—I regret that I was not present at the meeting on the 15th December when the important subject of the treatment of our Ancient Monuments was under discussion. Had I been there I might have ventured to add a word in respect to the past rather than to the future. The latter bulked so largely in the proceedings that readers of the opening speech in the discussion would derive the impression that a clean sweep had been made of past methods, former officials had been jettisoned, and in the future our ancient buildings would be treated in a manner in which Momus himself could find nothing to criticise. Later speeches by some of those who will have the actual work in hand correct this impression. These wary officials know only too well that in face of the ever-varying problems presented by our old monuments, with their differences in material, situation, and condition, it is impossible to please everyone. They are aware that all their taste, skill, and experience, the quality and extent of which one acknowledges with the utmost cordiality and satisfaction—that all these technical qualifications, to say nothing of genius, will not avail to save some of their proceedings from being called in question. They will go on doing their best, profiting by the errors of their forerunners, and will make a better business of preservation than it has ever been made before, but they would probably be the last to claim infallibility. This consideration emboldens me to question whether justice was done on the 15th December to the work of the last decade. It seems absurd to defend a Government Department against itself, but it really is not the case, as might naturally be inferred, that monuments such as Holyrood, Glasgow Cathedral, and Edinburgh Castle have been for the last few years under the care of architects "who have not had the opportunity of an actual expert training." Had this been so there are some of us in Scotland who would have had a word to say on the matter. It would hardly be guessed by the uninstructed reader of the speech from which I have quoted that these and other Scottish monuments have in recent years been under the care of an architect of great technical experience, who is moreover a Fellow of the Institute, a Vice-President of the Society of Antiquaries of Scotland, and a Member of the Royal Commission on Ancient Scottish Monuments. When one compares his treatment of the buildings with that which at any rate Edinburgh Castle used to receive—I have in my mind a definite illustration—and remembers how careful and conservative he has been in his operations over a wide area, one's sense of what is just and generous is not a little offended at the summary way in which he and his work have been thrown over. Some expressions in the Paper itself conveyed a false impression, and gave an un-

fortunate lead that was only too readily taken up. Mr. Forsyth condemns, as we all do, the French system of wholesale "restoration," and then goes on in his next paragraph to hint that the same sins have been in process of commission here. What he really means is not that there has been "restoration," but "too much repair," and this is rather a different matter. He seemed to me to explain what was in his mind in his speech of acknowledgment when he complains of a certain ruin that it looks now a new ruin. This may or may not apply to Holyrood, but I can quite understand the expression in this connection. It is one of the difficulties that confront the repairer that he cannot really tell what condition a building is in without destroying a good deal of the lovely patina of age that covers it. The reader of the Paper insisted on the need for a thorough diagnosis, and deprecated a merely "hasty and limited inspection." Now, a doctor does not, as a rule, diagnose a patient with all his clothes on, and a certain stripping of a structure seems in many cases an essential preliminary to any thorough remedial treatment. I know in the case of Holyrood that cavities in parts of the fabric that threatened their stability were only revealed through the removal of the old surface patina, though this removal represented an æsthetic loss. Happily the atmosphere of "Auld Reekie" will before very long replace what has gone! This, of course, is a matter on which there will be the differences of opinion I have referred to, and I am not setting up my own personal judgment. Rather would I remind members of the Art Committee of the Institute, and their former capable and experienced Secretary, of the judgment they themselves as experts passed on the work on this very building when it was in progress. Mr. Forsyth himself wrote for a report on what was being done, and on the basis not of this only, but of the photographs by which it was accompanied, they expressed themselves "satisfied that the work of repair is being conducted with all the reverent care that could be desired for this venerable and historic structure."* It has certainly struck me as somewhat curious that no members of the Art Committee present on the 15th December remembered their own decision of a few years ago, and by saying a word in season tempered with some justice to the past the enthusiasm for the new heavens and the new earth that had taken possession of the meeting.—I am, etc.,

G. BALDWIN BROWN [*Hon. A.*].

The University, Edinburgh, 2nd Jan. 1914.

THE PROFESSION AND REGISTRATION.

To the Editor, JOURNAL R.I.B.A.—

SIR,—The following statement appeared in one of the building papers of the 9th January—"The

profession almost unanimously demands Registration; the Society is promoting a Bill."

I think that the profession is strongly in favour of the principle of Registration, and I was one of the first to advocate the idea, which is an excellent one.

A large Registration Committee was formed by the R.I.B.A., and I think practically every man on that Committee was at first in sympathy with the proposal to frame a Bill. The best advice was obtained, which was to the effect that, if framed, the Bill would have little chance of becoming law, and the Council was, of course, much impressed by the opinions of experts. But before coming to a decision the Allied Societies were consulted.

There are 19 Allied Societies, and 17 replied; the only two that did not do so were Dundee with 61 members and Edinburgh with 120 members. Six Societies advised the drafting of a Registration Bill; they were the Aberdeen, Devon, Hampshire, Leeds, Leicester, and Irish Societies, with a total of 478 members. But after the reply was received from Ireland, our President read a letter of the 5th January from the President of the Royal Institute of Architects of Ireland advocating an alteration in the Charter instead of a Registration Bill; however, we will give the Bill advocates the benefit of the first opinion.

All the other Societies that replied were in favour of an alteration of the Charter; all the great provincial centres supported the Council. We had with us Birmingham, Liverpool, Manchester, Sheffield, and Glasgow; these, with the other Societies supporting the Council, representing about 1,300 architects. The Council was also warmly supported by the President of the Architectural Association, representing about 1,540 men.

The R.I.B.A. has 2,514 Members and 2,077 Licentiates, and at the General Meeting on the 5th January it was resolved unanimously not to frame a Registration Bill.

The result is that the representatives of, at most, 478 architects advocated a Registration Bill, and the representatives of over 7,400 architects decided to the contrary. The above are the latest figures that can be obtained, and they clearly show that the profession is now strongly opposed to a Registration Bill.

I hope every architect will read the splendid speech of Sir Aston Webb, who showed so clearly that it would be a waste of time and money to proceed with any Registration Bill. Sir Aston's arguments were so convincing that even Mr. Tubbs, the President of the Society of Architects, and Mr. Lovell, an active member of that body, had not a word to say against them, and they did not vote against the Resolution that the R.I.B.A. should *not* draft a Bill but should attempt to obtain a new Charter.—Yours faithfully,

SYDNEY PERKS, F.S.A. [*F.*].

* JOURNAL R.I.B.A., 20th March 1903, Vol. XVI. p. 356



9 CONDUIT STREET, LONDON, W., 17th January 1914.

CHRONICLE.

REGISTRATION OF ARCHITECTS.

Sir Aston Webb's Amendment.

The further discussion on the Report and Recommendations of the Council respecting the question of the Registration of Architects, which had been adjourned from the meeting of the 1st December, took place on Monday, the 5th January, at a meeting specially convened for the purpose. The President, Mr. Reginald Blomfield, A.R.A., was in the Chair, and there were present 62 Fellows, including the Presidents of several Allied Societies, and 117 Associates.

The President in opening the proceedings said that members would have seen from the JOURNAL of the 6th December that the information asked for by Mr. Douglas Topley in the amendment discussed at the last meeting had been very fully given in that number. Mr. Topley, continued the President, had since written asking permission to withdraw his amendment, and before proceeding further he would take the sense of the Meeting as to whether that course should be adopted.

The Meeting having signified its assent by show of hands, the President announced that two notices of amendment had been received, one from Mr. Topley and one from Sir Aston Webb. The latter having priority of date he would call upon Sir Aston to move his amendment.

SIR ASTON WEBB, K.C.V.O., C.B., R.A. [F.]: The suggestion I should like to offer is that we defer for the present further discussion of the details of the Report, the adoption of which has been moved by Mr. Stanley Peach. Many of these details have been very properly called in question by Mr. Hall and others, as needing further debate. I beg therefore to move: "That the Council be hereby authorised to prepare, and to submit for the approval of the General Body, a petition for presentation to the King, praying his Majesty to grant a new Charter, containing such further privileges and powers as are required to promote effectively the advancement of architecture by enabling the Royal Institute of British Architects to register and to distinguish persons qualified to practise." The reason I venture to make this proposal is that we have had this matter before us for so many years, that it seems to me the time

has arrived when we should endeavour to agree upon a principle. I agree that there may be debatable points in the recommendations put forward in the Council's Report. That Report has been most carefully considered, but it is only natural that members may have various criticisms to offer before the Report as a whole is put to the vote. The question of principle, however, whether we are to go to Parliament to regulate our affairs, or whether we are to go for a Charter to give us additional powers to manage our own affairs, I think we should try to settle at once, and I hope we shall do so to-night—(hear, hear)—and have a direct vote, one way or the other. If I may say one personal word, many of you know that I have been opposed to statutory registration. That is quite true; I have been. But I can assure you that when our President honoured us by taking the presidency of this Institute I felt that there was so large an expression of opinion throughout the country in favour of statutory registration that I was prepared to support him in any scheme which seemed practicable and that could be carried through to a successful issue; and I am still prepared to do so. No individual member of a great Institute like ours has any right to set his own view against the views of a large majority of his fellow members; and I hope that those who know me are aware that I am not one to set myself up as an authority against a majority of my professional brethren. Therefore, I was quite prepared to concur, and to take no further part in the proceedings; it is due to my feeling of loyalty to the Institute and to our President that I find myself here, in a difficult position, to support the proposals which he and the Council have laid before you. (Applause.) I am afraid I must say over again several things which I said the other night, for many have told me, and have written to say, that they are in favour of statutory registration, but that if the Council have found it impossible of attainment they would support the Council's Report after having heard the reasons which had led them to that decision. And it is for us to-night to try to make it clear to you why the Committee and the Council, who have given so much time to this question, have come to the conclusion which has resulted in this Report. From the beginning of this movement many Bills on various principles have been brought forward with the object of accomplishing the end in view—viz., statutory registration. The Society of Architects have tried, we ourselves have tried, to think of some method by which nobody should be allowed to practise architecture unless he had passed a certain standard of education. That, of course, sounds a most excellent thing to strive for; but when we got to close quarters with it, it was at once seen to be impossible. And in this practical world you must discriminate between what is possible and what is not possible. It is no good trying to bring about a thing which experts declare to be impossible. And the reason it would not be possible to ensure that nobody should be allowed to practise architecture unless he had passed a certain standard was because it required legislation by Parliament—always an extremely difficult thing to get, but especially so in this case. Engineers, for instance, would say, "Well, but I am not going to undertake always to employ an architect; do you mean to say I am not to design any of my iron work, or to design anything which approaches architecture, and have nothing to do with anything of that kind?" The Engineers are an extremely strong body, who would be against us. And surveyors, again—I hardly think it is fair to expect that a surveyor who has a large estate to manage should not do any of the architectural work on that estate. It is ob-

vious he would oppose such a proposition, and we know the Surveyors' Institution would. And, if this Bill is opposed, if it is blocked, there is no possible chance of its passing. The penalising clauses of such Bill, we believe, Parliament would never pass. The other alternative is to do what the Bill of 1905 attempted to do; that is to say, that nobody should be allowed to call himself an architect—not that he should not be allowed to practise architecture, but that he should not be allowed to call himself an architect—unless he had passed certain examinations. That is the whole gist of the 1905 Bill. Of course, that would be all right if one could suppose that it would be passed. But we are assured that the Government would say No; and even if such a proposal were passed, the surveyor would still come in. He would say, "I don't care at all, because I shall still call myself a surveyor." Christopher Wren was a surveyor; he was surveyor of St. Paul's Cathedral, and he was the architect of St. Paul's. The late Mr. Norman Shaw used to say, "I do not mind; I shall simply call myself a surveyor." There would be endless other ways of keeping out of the Act. The serious difficulty which is brought before us by members who practise out of London is that surveyors and estate agents do so much work which properly ought to fall to architects. I feel that, too; it is very annoying that it should be so. I wish we could prevent it. But the Act will not prevent it; they will still be surveyors. True, it would prevent a man putting up in his window a notice that he was a builder, an undertaker, and an architect. But should a serious profession mind very much if they do occasionally see that? Is it sufficient reason for going to Parliament to ask for the very large penal powers which the Bill proposes? We are assured that Parliament would never consider the giving of such powers on that account. The Bill of 1905 came before the Institute, was fully discussed, and it was decided that it would not give what was required. So a Registration Committee was formed, of which I happened to be a member, and we took evidence from a large number of people, and weighed the *pros* and *cons*, and we called as witnesses an equal number in favour of registration, and against it. We took the evidence of these gentlemen, and finally issued our report, which is known as the 1907 Report, or, as it has been called, the Compromise. And the Compromise was this: that the Institute should endeavour to obtain statutory recognition for its membership; that the Institute should control its own affairs and be its own registration authority, but not to go outside and try to secure that nobody else shall do a certain thing. We recommended that all architects should pass certain examinations before receiving the diploma of membership, that a temporary class of Licentiates should be formed, and that in future Fellows should be elected from the class of Associates, or, in special cases, by the Council; and that the disciplinary powers of the Institute should be increased, with power of appeal. That Report of 1907 was brought before the Institute, and it was, I think, recognised by all parties to be a fair compromise. Nobody can expect to get everything that he wants, and no reasonable man expects to get everything he asks for. That is the reason so many people ask for a great deal more than they expect to get! It was recognised that the Report was giving a great deal, and taking a great deal, and it was passed unanimously. The Council of the Institute have since been carrying out that Report of 1907. It became necessary to have a new Charter, in order that the Licentiates should be brought in, and other questions were dealt with, and eventually the B, C, and D Prin-

ciples put forward in the 1907 Report* were carried out. The next point was that the Institute should endeavour to obtain Parliamentary recognition of its membership. That issue has been rather confused, and many thought that Parliamentary recognition meant the Parliamentary recognition of all architects. This Report of ours never meant anything of the kind; it means what it says, Parliamentary recognition of its membership. When our present President came into office he appointed another Committee to consider how best this could be done; and I believe that every member of that Committee, except, perhaps, one or two, was favourable to Parliamentary registration. They started on those lines, and—I have gone over this ground before, so I will state it quite shortly—we decided, first of all, to ask the solicitors. I understand that some of our younger men here say that they do not care for solicitors. That may be so, but you cannot get away from them; the law is the law, and I will defy anybody to understand the law. The only way to get an inkling about it is to ask solicitors. We took the only possible course. We have a solicitor of very high standing, and we consulted him; and we consulted a very high Parliamentary barrister, Mr. John Kennedy, who has been engaged in many of these cases. We went to these gentlemen and told them what we wanted, and asked what chance there was of our being able to get it. They said that at present there was no chance at all, and that in the congested condition of the House of Commons they could hold out no prospect of our getting what we wanted. We asked them what would be the best thing to do. They said we might try to get a Government Department to support us—that the Board of Education or the Board of Trade might take us up. We know, however, that a Government Department is not likely to take us up at the present time; they are more likely to let us down! We asked what other course we could take. They said we ought to try and find out from other kindred societies—the Engineers, the Surveyors, and such-like bodies, whose work is in connection with ours—what view they would take of our Bill; it was no good our spending a large sum of money and finding that directly the Bill got into the House these gentlemen were going to oppose it. If it was not an official measure, and it was an opposed Private Member's Bill, it had no chance. Another thing they said we might do was to try and prove a public case for the measure—that is to say, prove to the public that it is absolutely to their interest that architects should have registration, so that the public, in their own interest, should distinguish between good and bad architects. Such are the difficulties which were before us, and if anybody attempts to get a Registration Bill through and takes the trouble that the Committee have done, they will be met with these difficulties from the very beginning. In spite of that, however, when this legal opinion came back to the Committee, they still decided they would try a Bill. The solicitors said that if we must have a Bill they thought we should find the 1905 Bill as good as any other to found our proposals upon. So the Committee took the 1905 Bill and deliberated upon it day after day. They used to meet at 2.30 in the afternoon, the very best time of the day, so as to give plenty of opportunity for the country members to come up and attend it. The Bill was discussed clause by clause, and various alterations made in it. A Report was then prepared by Mr. Slater and Mr. Peach, and this Report is now in the hands of mem-

* JOURNAL, 9th March 1907, p. 328.

bers. Mr. Peach, as you know, is one of the most ardent Registrationists. (Applause.) If you read between the lines of that Report you will see that they did not consider that the Bill had any prospect of passing. The whole matter then went to the Constitutional Committee, and the Report which you have in your hands is the result. I should like to say that if, as a body, you refer such a matter as this to a large number of your members, you have no other object in view but to do the best for the Institute, and you should accept their proposals. It is impossible for a large meeting like this to go into details such as have been gone into by your Committee. I can only tell you roughly the difficulties which arose, and which convinced your representatives on that Committee that it was not possible to bring in a Bill which stood any chance of passing Parliament. It is a very serious thing getting a Bill through Parliament. It is all very well to say we will go for it. You can go for it, but it is no good going for it unless you have a reasonable prospect of getting it. (Applause.) I understand some of our members say, Let us go for it anyhow. (Hear, hear.) If I may say so, I assert that it is not a wise thing for a great Institute like this to go forward with a thing which they know they cannot get. The Institute would look foolish to bring in a Bill year by year and raise hopes among people which we know cannot be realised, and then to have it neglected and thrown on one side. I want to say a word about what the present proposals would do. They would give a distinctive and exclusive title to members of this Institute. I understand that the Privy Council would be prepared to consider Schedules of Charges which would, if approved, be held in Courts of Law as reasonable and proper charges. (Hear, hear.) That would be a very great thing. Many people have said that at the present time in Courts of Law—I am happy to say I have not much experience of them—architects' bills are not recognised, and the Judge feels himself at liberty to treat our charges in any way he likes. That would not then be so. The third advantage we should have would be that our examinations would be approved by the Privy Council, and we are given to understand we should have no difficulty about this, because they look upon us as reasonable men who know what they want, so that we should have no difficulty in getting our examinations placed on a proper basis. (Applause.) Many of us have said for a long time that the great thing we want is improved education through some form of registration, and this we think we shall get. Also, of course, the examinations would be open to others who could come in and take the title of "Chartered Architect" or "Registered Architect," whatever the Institute thinks would be the best title. One of the detailed difficulties of the statutory Bill was that the power of examining and so forth would be taken out of the hands of the Institute. You cannot get away from it. If Government give you these exclusive privileges which you ask, they will demand, and properly demand, a certain voice in the way in which these privileges are managed: and the closer we went into that, the more we were convinced that by degrees, even if it were not so at first, we should find that the Institute would have control of these matters taken out of its hands. We do not want them taken out of our hands. (Applause.) We want to retain these powers. We have always gone on the principle that architects know what architects ought to know, and it is for architects to decide what questions they should be asked and what tests should be set them. We are convinced that under legislation of this sort we should lose that power, and lose what we hold to be a very

important power. One word more. This is not a matter as between Fellows and Associates. (Applause.) This is a matter for the Institute as a whole; we can settle any differences, if there are any, between our Fellows and Associates. I am sure there is not a Fellow in this room who would wish to put an Associate under any disabilities which he considers unfair. (Hear, hear.) I am advocating, for a special reason, this one principle, that we should go for a Charter rather than for statutory powers which would bind us to Parliament in a way which it would be almost impossible to alter. In the past we have tried to make our Charters as open as possible, to cover every point, and yet we have had to go back again and again to get them altered—it is not desirable to do that often, still we can do it—but fancy an Act of Parliament binding architects! There are not three architects in the House of Commons. Fancy, after we have tied ourselves up in that way, going back to get an alteration! It would be undesirable, apart from its impracticability. Our solicitors say, "Cannot you do all you want by Charter?" It is against their own interest to say that, but they are looking at it generally, and tell us that we could get much that we wanted in that way. And so I appeal to this large body of members assembled here to-night to accept this very carefully considered recommendation of your Council and your Committee, and I appeal to you also to support your distinguished President, who is passing through a time of considerable anxiety—(applause)—and to assist him in carrying through this recommendation which I believe would do an immense deal for the Institute. And if I may say this also, I think we can all do a great deal to ensure that our profession is held in high esteem by keeping our own shields bright, by keeping our practice high and above all question, and by encouraging the view which should be widely recognised, that membership of the Institute is, to a great extent, a guarantee of attainment in architecture. If we do that, we shall cease to require the assistance which would be given by this Charter; we should stand high in public esteem; and we should be recognised—as we already are to a great extent—as highly honourable practising architects, and people would then no more think of going to an estate agent for their architecture than they would to an agriculturist. And therefore I venture, gentlemen, to move the amendment which I read at the commencement of my remarks. (Applause.)

MR. G. LEONARD ELLINGTON [A.]: I desire to second the amendment which Sir Aston Webb has proposed in such very able terms. I desire to do so because recently, at an informal meeting convened for the purpose by the Associate-Members of Council, it was my privilege to hear the opinions of many of my brother Associates upon the proposals of the Council placed before them. As a result, I have come to the conclusion that there is a good deal in the Council's proposals which might be usefully reconsidered in the light of those opinions. But I say that the amendment which Sir Aston Webb has now proposed is entitled to the support of this Meeting as forming a rallying point for all the members of the Institute, and as carrying a step further the settled policy of the Institute which was arrived at, after years of discussion, in 1907. As Sir Aston Webb has told us, the Institute then agreed on a certain definite line of policy in a resolution which it then passed. Under our Charter that resolution governs our proceedings even to-day, and the proposals which the Council made for proceeding by Charter are in my mind, and I think in the mind of everybody who can give it a moment's consideration, the natural

corollary or alternative to the first principle which was embodied in that agreed course of procedure. The amendment, however, can be advocated, I think, on wider grounds than that—and this is of necessity a question which must be regarded in the widest sense. There is unfortunately a tendency amongst all architects—I suppose it arises from their training—to look too closely into small details rather than to broad principles. I think the Meeting will realise that it is clear that a Body of the importance of this Institute could not stand, and should not be exposed to the risk of receiving, a rebuff from any Parliament which may from time to time be in power. (Hear, hear.) It would be fatal. The proposals to proceed by Charter will, at any rate, enable us to achieve something to fulfil what I regard as a debt of honour to those 2,000 or so Licentiate whom we have admitted to the Institute—(hear, hear)—and I think we can secure great benefits to members by extending our power in connection with the application of the Institute's Forms of Declaration and Code of Professional Conduct to all those members of the Allied Societies not Fellows, Associates, or Licentiates of this Institute. It will obviate, I am sure, if this amendment is carried, a reopening of the questions, which did so much to keep the Institute from a settled policy and delayed for so long its natural expansion. Procedure by Charter is a method of settlement, too, which has been in contemplation for some years past. It was fully contemplated as a practical solution of the difficulty of registration, even by such experts on the question of registration as the Society of Architects themselves. In the agreement which they proposed that the Institute should enter into when we were to take them in, there was a provision made for new by-laws, and one of those called into being a committee which was to exist for furthering registration till such time as a scheme of registration was secured by Royal Charter, Act of Parliament, or other provision for the registration of architects, as might be approved by the Council. Therefore the practicability of getting what we want by Charter was fully foreseen and recognised at that time. The fact that we are likely to get what we want can be gauged by the undoubted unfriendliness to the proposals of the Council which I think is being extended by the Society of Architects. If we put two and two together, as we must sometimes, we can only interpret the object of the strenuous campaign in the professional Press and of the extraordinary correspondence some of us have received from representatives of the Society of Architects, as an attempt to create dissension in the ranks of the Institute on this registration question, and to undermine the position it holds by seeking to tamper with the allegiance of its members. (Hear, hear.) I think the Institute should be extremely obliged to Sir Aston Webb, because it seems to me that in proposing this amendment he has put in the forefront of the strife the battle standard of the Institute. (Applause.) It is a point to which we can rally, and I believe if this proposal for a new Charter goes through, we on the Council will find an opportunity of redressing inequalities of representation and of consolidating the fabric of the Institute, so that it will stand unmoved for the years to come. (Applause.) It is because I am so convinced that the proposal to proceed by Charter, leaving out questions of detail for the moment, is the only practical solution which any Council can put forward, that I make the strongest appeal to all my brother Associates to support the Council—(applause)—and to all moderate men not to let the tail wag the dog. (Hear, hear.)

In conclusion, while we have the power, power which we possess under our Charter, to move and exist in the light of the sun, why, I ask, should we cry out for the moon? (Applause.)

MR. MAURICE B. ADAMS [F.]: Sir Aston Webb did not refer to a matter in regard to which I feel somewhat strongly. It would be my last wish to throw an apple of discord at all, because I thoroughly agree with what Sir Aston Webb has said. The last speaker observed that he did not desire that the tail should wag the dog; but I want to be assured that by supporting this amendment we are not committing ourselves to give the Licentiates that power of voting which the Report of the Council seemed to me to propose. Having served on many Committees called upon to deal with the passing of work done by candidates for Licentiate I am fully aware of the standard of work displayed by many who ultimately were chosen for election.

THE PRESIDENT: I do not think you are speaking to the motion before the meeting, Mr. Adams. This was among the details which the form of the amendment specifically left over for discussion, and it is part of Sir Aston Webb's proposal that we should confine ourselves to the broad and simple issue whether we shall proceed by Charter or by means of a Bill. This question of the position of the Licentiates will be held over for further consideration, and in so far as you support the proposal in the amendment you are not pledged to the other proposals, which will be dealt with later.

MR. ADAMS: Mr. Elkington introduced a direct allusion to these Licentiates, or I should not have risen to put my question.

MR. ELKINGTON: On a point of order, Sir, I did not refer to the Licentiates.

THE PRESIDENT: Whether they have been referred to or not, I lay it down now that all reference to this point is irrelevant.

MR. ADAMS: I am satisfied, Sir.

MR. S. DOUGLAS TOPLEY [A.]: I want, Sir, to make a personal explanation. Sir Aston Webb did me the honour of referring to something I said at the last meeting with regard to our solicitors. What I said was: "Well, gentlemen, if the entire legal fraternity were to attend our meeting, and were to solemnly affirm that the established principles of registration are not suitable material on which to frame a Bill, as an architect and a citizen I should say they were all wrong." In making that statement I assumed that the expression "established principles" meant what it does mean. It appeared subsequently, from the information which you published, that it referred to pious aspirations which this Institute agreed to in 1907. If I had known that at the time I should have spoken differently. (Applause.)

MR. G. A. T. MIDDLETON [A.]: I do not know that I should have risen so early as this if it were not for the reference which has been made to the Society of Architects. The Society has been referred to, it seemed to me, in a somewhat slighting way, when that Society has been attempting to support the Institute in every respect. It has been hinted that the Society has been a source of strife; but that is not so. I think from the very opening of this matter, from the time when I first joined the Institute, I have always myself considered that we were all acting for the good of architecture, that we all intend and wish to go forward with this architectural advance which we are aiming at—which the Society is aiming at as well as the Institute. The Society has always had registration in its mind. There was a time when I certainly thought it might be possible to have registration

within this Institute, and I took some considerable part in trying to bring about amalgamation between the Society and the Institute some few years ago. I was exceedingly anxious to, for I thought that by joint action of all architects we could get this great thing done, not by one or by two societies alone, but by all architects acting together. And I think still that if anything is to be done, it is not to be done by one or by the other Society apart from the Institute, or by one body carping at the other body, but rather by all acting in unity. We are all acting for the good of architecture and architects, for the advance of our calling. I do not believe the Society has ever attempted to carp at the Institute, and I do not think the Institute should attempt to carp at the Society. After all, we are all working harmoniously, or should be, for one great thing. Can we work together? Is it possible? ("No.") Is it possible to get a Bill for registration within this Institute, a great and generous Bill, so that every architect will be brought into the Institute? I thought I saw my way to it at one time, but I confess it has been made very difficult by this fact, that the Institute is the Institute of British Architects, with other societies allied to it in the Colonies. But the Institute's great policy in the future must be to form branches in our Colonial centres, in our future Commonwealths; it is an Institute of British Architects all over the world, whereas the British Legislature can only legislate for Great Britain; it cannot touch these vast Dependencies, and there is a great difficulty in registering only within the Institute. So we are driven back to a Bill. ("To the Charter.") No, a Charter cannot give that power which is absolutely essential to ensure that every architect in the country shall be properly educated, to form one great foundation upon which we are afterwards to build. We must do it if we want a proper advance in the education of architects in the future; we must have every architect in the kingdom on a certain sound basis and level. Sir Aston Webb's whole argument against the possibility of carrying a Bill seemed to be that we should meet with the opposition of engineers and of surveyors. ("No.") He said so; he brought these two points forward, and I think there is comparatively little difficulty in getting over it. I have a draft of the Society's Bill here, which is to be presented in February.

The PRESIDENT: We will not go into that, please.

Mr. MIDDLETON: There the matter is dealt with, I think, satisfactorily. At any rate, I would say this to Mr. Elkington: there is no desire to create dissension on the part of the Society, and if it is possible to bring the profession into harmony, so that all may work together for one great object, the Society is willing to agree to it. Although I am not on the Council of that body, I think I can say that if there is a possible way of agreement, and any step is made towards it, the Society will follow in that way. ("Thank you!") But I think the step must come from here. ("Oh!") You know what was said about the Society when there was the question of amalgamation here.

Mr. WHITE: Is this the question before us, Sir?

The PRESIDENT: I think not, Mr. Middleton. The point is whether we shall proceed by Charter or by Bill.

Mr. MIDDLETON: The Charter, as I take it, cannot by any possibility provide that every architect in the country shall be properly educated or brought within theegis of this Institute, or within its rules. But a Bill can. ("No.") We can try and drive it through as far as we can. If the Institute has not the means and the ability to do it, the Society can at least try. Let it try, and don't attempt to hinder it. Help it. A

Bill will do infinitely better work than a Charter can possibly do. But please remember the two bodies are not in antagonism. They are rivals to some extent, but in this great object they are brothers working for one thing—architectural advance.

Mr. RUSSELL: I suggest to Mr. Middleton that he is losing sight of the fact that though we go to the Privy Council for a Charter now, it does not preclude us from going to Parliament hereafter for a Bill if it is found necessary to do so.

Mr. TOPLEY: I understand that now before the meeting there are two wide issues: whether we proceed by Charter, or whether we proceed by Bill. I understand that is so.

The PRESIDENT: Yes.

Mr. TOPLEY: Under those circumstances, although I came here to speak—if I had moved the amendment of which I gave notice—on behalf of my fellow-Associates, yet, under the new circumstances which have arisen to-night, if you will allow me, I shall speak on my own behalf only; I pledge no one else. With regard to the proposal to go to the Privy Council for a new Charter, rather than proceed by Bill, I shall have to vote against this amendment. Mr. Elkington referred to the Licentiates. We have enrolled over 2,000 men; but it must be remembered that those men associated themselves with this Institute as Licentiates on the understanding that we were going to Parliament. ("No.") I do not say there was a specific bargain to that effect, but it was understood throughout the whole profession during the time that class was open that this Institute would go to Parliament. Indeed, in the very resolution on which Sir Aston Webb relies the first principle is that we obtain statutory recognition of our membership, and statutory recognition implies Parliament. And to come forward at this late hour, for reasons which I do not appreciate, and say, "We have reconsidered this, we will not go to Parliament, but will endeavour to create a new class of membership by Privy Council," is neither meeting the resolution nor abandoning it. And I submit that we should deal with this matter in a perfectly plain and straightforward way. We should either act in accordance with our former decisions, or rescind them. In the matter of Parliamentary recognition of our membership we should either move a resolution to the effect that we feel bound to abandon that course, or go to Parliament. I am in favour of going to Parliament. We are told we stand no chance of getting a Bill passed. Is that a reason for not going to Parliament? ("Yes.") I think it is an excellent reason for going to Parliament. Does anyone receive any hope of getting a Bill through before it comes to the House? ("Yes.") I think not. ("Always.") But this proposition now commits the Institute to creating a new class of membership. ("No.")

The PRESIDENT: We are not going into that; we are dealing with the plain issue, which I have put before the meeting several times.

Mr. TOPLEY: I am anxious not to occupy the time of the meeting unnecessarily; but having enrolled these men as Licentiates we are bound to go to Parliament to try to get a Bill passed.

The PRESIDENT: That is a point which has been left over. I laid it down just now, and Mr. Adams accepted it. These are details which will have to be considered later.

Mr. TOPLEY: We are considering whether to go to Parliament or to the Privy Council.

The PRESIDENT: Yes.

Mr. TOPLEY: We ought to seriously consider a Bill,

and to approach Parliament before we go to the Privy Council. And for this reason: that if we go to the Privy Council we shall be following in the steps of other professions, who have done the same thing for the same reason, and are now further off getting statutory recognition or registration than ever. There are advantages to be obtained from going to the Privy Council, I admit; but the danger is, that in order to achieve some little good for ourselves we postpone the larger issues which are contained in registration by Parliament. What is it that registrationists have been working for all these years? The controversy has had many phases. If I trace its development correctly, there has been one underlying principle which justifies registration, without which it could not be justified. It is not to reduce the number of architectural practitioners, or to exalt the able men above the inefficient by artificial means; the underlying purpose is to prevent ignorant persons debasing architecture by using the term architect before they are able to do justice to that calling. I submit, with great respect, that there is one way, and only one way, whereby that can be achieved, and that is by Parliament building a wall round the whole profession. In the first instance it will have to include every practitioner. We cannot do a single thing to advance the material position of the architects of the present generation. To attempt to do so is to chase a shadow. By promoting a Bill in Parliament we might do some good for the architects of the next generation, and I think we can do something for the architecture of the next generation. So long as the Parliamentary registration movement was conducted for improving the material conditions of architects I was opposed to it, but when it captured the imagination of the flower of our profession, and they recommended it as a measure for improving architecture in this country, then my support was given to them. But registration for other purposes is of no avail. (Applause.)

Mr. C. STANLEY PEACH [F.]: I thought after the very clear explanation which Sir Aston Webb gave us at the commencement of the meeting that it would hardly have been necessary for me to say anything on the subject; but in the course of the discussion one or two points have arisen which I think ought to be answered. I will deal with Mr. Topley's points first. Mr. Topley has said that he is taken by surprise by the fact that an amendment has been moved inviting this meeting to affirm the principle which underlies the whole of the recommendations. In criticising this Mr. Topley told us that he is in a great difficulty, because he thinks that the Institute is committed to promote a Bill in Parliament. Now that is exactly what the Institute is not committed to. Anyone who reads the history of this registration question—and you must remember that the question has been before numerous Committees of the Institute, who have all had occasion to go into it—everyone who studies the matter finds that the Institute is committed, first of all, to obtain certain privileges and benefits which were held out as an inducement to the Licentiate to join the Institute, and that those benefits were to be obtained by Charter. Having got them by Charter, the Institute is committed, if it be practicable, to get its Charter privileges confirmed by a Bill or Act of Parliament if necessary. There have always been before the profession two methods for obtaining registration, and those methods constitute the fundamental difference between the procedure of the Society of Architects and the procedure of this Institute. The Institute has been built up by Charter. All the benefits which in the course of years have been obtained for the profession have been got by

Charter, and although for twenty-five years or more the Society of Architects—I speak in no disrespectful terms of the Society of Architects, I have the greatest respect for them—although the Society of Architects have put forward and advocated the Parliamentary method, it is no nearer securing one single benefit for the profession to-day than it was in 1884. (Hear, hear.) Mr. Topley says, Let us try a Bill. But a Bill has been tried. A Bill was tried in 1885—I think my date is correct—and a very excellent Bill it was, if a Bill is to become law, for it erected a comprehensive ring-fence round the whole of the constructive professions, engineers, architects, surveyors—all were to be shut in, and everybody else shut out. If any Bill, surely that was the Bill. But it was found utterly impracticable to have so much, so that even those who then were wholly in favour of procedure by Bill—and I was one of them—came to the conclusion that we must alter the Bill if it were to become law. And it was altered to one which was confined to architects. That is the Parliamentary method which has been before the profession for years; it is the method which the Society of Architects advocates. What is the position of the Society of Architects to-day and of this method? In those days there were 300 members of the Society of Architects, and they now number 800. In this Institute there were 1,000 members, and to-day, counting members of Allied Societies, there are 7,000. (Applause.) Are not those figures absolutely convincing? Why has this Institute risen from 1,000 to 7,000 during the period that the Society of Architects has risen only from 300 to 800? Is it not because the method which this Institute is advocating is the method which has the support of the majority of the profession? It is so. It is useless for us in this room to carry a resolution unless that resolution has the hearty support of the whole of our profession all over the country. This Institute, by Committee after Committee, by Council after Council, has gauged the opinion of architects all over the country, and the Council, before they made these recommendations, satisfied themselves that they had the whole-hearted support of the profession behind them. I do not mean of any small section, or on details, but on the great, broad question, Shall we follow our traditions, shall we go to the King and ask him to give us a signal mark of his favour on his accession, and grant us a Charter, as his predecessors have done, or are we to batter our heads against a brick wall in trying to get Parliament to do what it cannot do? An Act of Parliament is not a panacea for every ill that flesh is heir to. Modern legislation seems to show that Parliamentary methods result in the maximum of bureaucratic interference for the minimum of public benefit. (Hear, hear.) That is what the Royal Institute of British Architects does not want. I believe we want to manage our profession ourselves, as we have always done, by well-known and eminent architects, members of the profession, men who have our respect and our admiration for their works, for their common sense, and for their ability. We do not want bureaucratic interference to control our examinations, and to say whether an architect or whether a builder should style himself an architect or not. Let us go on dignified lines as a great liberal profession, by Charter. We have received great benefits from that course; why drop our solid piece of substance for a shadow which has been proved to be as thin as the arguments which support it? (Applause.)

The President: I think we have had this proposal very thoroughly threshed out. (Hear, hear.) I shall not detain you with a long speech, but there are one or two remarks which I feel bound to make to you.

because I occupy the very honourable position of being your Chairman here to-night. This matter which you have to settle is a very serious matter indeed. (Hear, hear.) I think a wrong decision upon it may split the whole profession from top to bottom. ("It will.") I urge you carefully to consider what you are doing in the decision you arrive at. You have had some admirable explanations of the position to-night; Sir Aston Webb put it very clearly, so did Mr. Elkington, Mr. Peach, and Mr. Topley from his point of view, and Mr. Middleton from his, though Mr. Middleton perhaps fogged us a little on one or two points; but we have had a full discussion, and I want to put before you the position again, and for the last time. It is this—all our expert advisers have told us that this Bill is no go; that it cannot be done. However much we may like it, we cannot do it. Earlier in the evening you heard Sir Aston Webb say that if he felt that the great majority of the profession were definitely in favour of going for this Registration Bill he would not feel justified in standing in the way of it. I share that opinion entirely. If I was convinced that the large majority, not in this room only, but in the great profession of architects in this country, were definitely and decidedly in favour of a Registration Bill, I should feel bound in honour, so long as I occupied this chair, to forward it, whatever I think myself; I should feel it my duty, so long as I have the honour of being your President, to do so. But, gentlemen, I am convinced that it is not so. Your Council appointed a very large and representative Registration Committee, and they spent one and a half years in going into it most thoroughly. Every shade of opinion was represented there, and there was the most absolute intention to get the whole thing thoroughly threshed out. Nothing was held back. Sir Aston Webb said, I think, that the Committee, with possibly one exception, was composed of ardent Registrationists. Yet what was the result after this one and a half years of careful inquiry? The Committee reluctantly came to the conclusion that they could not do it, and they suggested an alternative course. You must recollect who your Council is in deciding this matter. Your Council is not a haphazard body; they are your duly elected representatives, and they comprise some of the ablest architects in this country. Your Council concluded it was impossible to go for the Bill, but that it was possible to get by a new Charter all the substantial advantages which would have been gained by a Bill. They therefore made you the recommendation which you have had before you. And that recommendation has been endorsed by the majority of the Allied Societies throughout the country. That is an important point. (Applause.) I have just had handed to me a letter dated Dec. 31 from Mr. Murray, the President of the Royal Institute of Architects of Ireland, and I will read it to you because it sets the position clearly before us, I think:—

DEAR SIR,—I am sorry to say that my engagements in Dublin prevent my being able to go over to London to attend the important General Meeting which is to be held on Monday next. As President of the Royal Institute of the Architects of Ireland, which represents the whole of the architectural profession in the sister country, I share with the rest of the Council of the Royal Institute the responsibility for recommending to the general body of members the far-reaching proposals which are now before them for consideration. The architects of Ireland would welcome the passing of a carefully drafted Registration Act, if such a measure were practicable at the present moment, but, in view of the opinion given to the Registration Com-

mittee by the legal advisers of the Institute, I am of opinion that the Institute would be well advised to adopt the alternative policy, of proceeding for the present by Charter, which has been arrived at as a result of the most exhaustive discussion by the Registration Committee, the Constitutional Committee, and the Council of the Royal Institute.—Yours faithfully,
ALBERT E. MURRAY.

That, I think, represents the view of the large majority of our Allied Societies. It also represents the view of the men whom we honour most in our calling. I do not want to press this point too hard, but in this room you have heard two of our past Presidents, Mr. Stokes and Sir Aston Webb, advocating this course, tried veterans of the Institute like Mr. Slater, Mr. Gibson, Mr. Hall, and many others whom we know well and have honoured, and who have done strenuous work for the last quarter of a century for the Institute. The opinions of men like these are not to be lightly brushed aside. And when you have this endorsement, it should weigh very seriously with you. There is one more point I would touch upon, though reluctantly; I would rather not touch upon it at all, but it has been brought up to-night. And that is our relations with the Society of Architects. I do not wish to say anything against the Society of Architects, but what I do say is that we in this Institute propose to manage our own affairs. (Loud applause.) If we believe, as we have reason to believe, that the opposition to the recommendations of your Council has been suggested from outside, has been engineered from outside, I do not believe this Institute will submit to it. (Applause.) I do not want to say anything more on this matter at all; it is painful to me; but I felt it my duty to bring before you to-night every factor of the case, and that is an important factor of the case. I shall now, without further remarks, put to you the amendment which has been proposed by Sir Aston Webb and seconded by Mr. Elkington. The amendment reads: "That the Council be hereby authorised to prepare, and to submit for the approval of the General Body, a petition for presentation to the King, praying his Majesty to grant a new Charter containing such further privileges and powers as are required to promote effectively the advancement of architecture by enabling the Royal Institute of British Architects to register and to distinguish persons qualified to practise."

Upon a show of hands the amendment was carried by a large majority.

MR. TOPLEY: Before you put that as a substantive motion, sir, I would like to make an appeal. We have made a very good fight against this proposition, and we believe in what we have said. But, having been beaten in this matter, I shall vote for it as a resolution. (Cheers.) I am aware that my action may be misunderstood. ("No.") I am persuaded to take the line I am taking very largely because I am determined to dissociate myself from those who are trying to bring the affairs of the Society of Architects into this Institute. I have had invitations to join the Society, but it has never seemed to me right to belong to both Societies. I judge no man, but that is my opinion. And now, gentlemen, I take the great liberty of appealing to my fellow Associates in this matter to admit we have been beaten, and let it go forth to the world that, though we do not agree, we can still work together in harmony. (Loud applause.)

THE PRESIDENT: Mr. Topley, allow me to congratulate you, sir, on that speech, and to congratulate you also on the very able way in which you have handled your points. I think it is a very sportsmanlike way

of taking a beating, and I shall now put to the Meeting this amendment as a substantive resolution.

This was then put, and was carried unanimously, the result being received with loud and prolonged cheers.

Mr. HALL: Might I make an appeal to Mr. Middleton, having regard to the way in which Mr. Topley has spoken? It is to ask him whether he will withdraw his motion for the 12th? It will save a great many men coming to the meeting, and I think, having regard to this very large meeting to-night, it would be a very graceful act to withdraw it, especially as he did not vote against the substantive motion.

Mr. MIDDLETON: I did not vote against the substantive resolution because I think I ought to follow the Institute. I think you will pardon me, as a member of the Society of Architects from the beginning, if I say I feel that I ought to be loyal to that body; but in this particular matter I can see the Institute will not support the Society in regard to its coming Bill, and so I shall certainly not bring forward my motion. (Hear, hear.)

The PRESIDENT: I am glad to hear you say that. The meeting then terminated.

Town Planning Lectures for Australasia.

Mr. W. R. Davidge [A.] has been invited to deliver two addresses on Town Planning before the Economics section of the British Association at Sydney and Melbourne during the course of the Annual Meetings which are to be held in Australia next August. Subsequent to the meetings, the Garden Cities and Town Planning Association is arranging for Mr. Davidge and Mr. Charles C. Reade, organiser of the Australasian Town Planning Tour, to deliver a series of lantern lectures in the principal centres of Australia and New Zealand. Mr. Davidge, who is District Surveyor for Lewisham, has carried out large housing schemes for the London County Council, including housing estates and artisans' colonies in the neighbourhood of London. He is a member of the Town Planning Committee of the R.I.B.A., holds the Gold Medal of the Surveyors' Institution of Great Britain for a Paper on Town Planning, and is an active member of the Garden Cities and Town Planning Association, the National Housing and Town Planning Council, and the London Society.

German Town Plans and Housing.

A lantern lecture entitled "German Town Plans and Housing" will be given by Mr. Charles C. Reade at the R.I.B.A. Galleries, 9 Conduit Street, W., on Tuesday, 3rd February, at 8.30 p.m., when Mr. Raymond Unwin [F.] will preside. Mr. Reade, who is Assistant Secretary of the Garden Cities and Town Planning Association, lately spent two months in Germany investigating housing and town-planning conditions in some of the principal towns and cities in Germany, and has marshalled much illustrated material and many plans showing not only recent developments in modern German Town Planning, but the effect of these plans on

the housing of the people. Those desirous of attending should apply to the Secretary R.I.B.A., 9 Conduit Street, W., or to the Garden Cities and Town Planning Association, 3 Gray's Inn Place, W.C.

Thatched Cottages.

Mr. L. Mark Kennaway, St. Helen's, Teignmouth, is issuing a pamphlet addressed to "Lovers of English Rural Scenery; landowners, stock-breeders, and others," inviting their support in preventing the substitution of corrugated iron or other modern roofing on cottages for the thatch that has so long been a distinguishing feature in the English country-side. Mr. Kennaway contends that the change, apart from its objectionable effect upon the landscape, is not justifiable on economic grounds, and his views are endorsed by letters and signatures from a wide variety of people similarly solicitous for the preservation of old rural scenery.

The Carpenters' Company Lectures.

The Carpenters' Company Lectures remaining to be delivered this winter are the following:—

- Jan. 21.—"History as Written in Sculpture," by Mr. T. Stirling Lee.
- Jan. 28.—"Romanesque Ornament," by Mr. F. Hamilton Jackson, R.B.A.
- Feb. 4.—"The Origin of Form in the Building Crafts," by Mr. W. H. Ansell [A.].
- Feb. 11.—"The Logical Treatment of Modern Construction," by Mr. H. W. Cubitt [A.].
- Feb. 18.—"The Case for the Jerry-Builder," by Mr. Herbert W. Wills [F.].
- Feb. 25.—"A Talk on Sculpture," by Mr. F. W. Pomeroy, A.R.A.
- Mar. 4.—"Woodwork, Old and New," by Mr. Charles Spooner [F.].
- Mar. 11.—"Cottage Housing; its Economic Limitations and Distinctive Character," by Mr. Maurice B. Adams [F.].

The Lectures are delivered at Carpenters' Hall, commencing at 7.45 p.m., and are illustrated by lantern photographs, &c. Admission is free by ticket to be obtained from Mr. J. Hutton Freeman, Clerk to the Company, Carpenters' Hall, London Wall.

OBITUARY.

Robert Douglas Sandilands, of Glasgow, whose death occurred on the 11th December, was elected a Fellow of the Institute in 1906. Mr. Sandilands entered the office of Mr. Alex. Petrie in 1875, and remained with him till 1880. In the latter year he was awarded a certificate of Hon. Mention for measured drawings of Dunblane Cathedral submitted in competition for the R.I.B.A. Silver Medal. From 1880 till 1885 he studied at the Ecole des Beaux-Arts, being attached especially to the studio of Professor Guadet, and achieving the

distinction of first mentions in architecture and building construction. In 1886 he started business in Glasgow in company with Mr. John Thomson, now a Fellow of the Institute. Buildings carried out jointly with his partner include Lanark Fever Hospital, churches at Glenluce and Whithorn, Gartloch Asylum, Royal Insurance Buildings, and St. James's School, Glasgow; Govan Town Hall and Municipal Buildings, Mansion House, Pollok-shields; Glasgow Parish Council Offices, Stobhill General Hospital, the City Improvement Trust Buildings near Glasgow Cross, the new Hutchesons' Girls' Grammar School, and a large number of other schools and churches.

Henry Jones Lanchester, who died on the 5th January (his eightieth birthday) at his home, Southlea, Haywards Heath, became an Associate of the Institute in 1874, a Fellow in 1903, and joined the class of Retired Fellows in 1908, though he had given up active practice some years previously. Mr. Lanchester was articled to the late John Wallen. He commenced practice as an architect in 1856, and carried out a number of buildings, most of them in the neighbourhood of Greenwich, being also engaged at this time in railway and estate surveys. In 1870 he took up his residence at Hove, Brighton, and was for many years occupied in laying out and in building work on the extensive Stanford Estate there. His handbook entitled "How to make a house healthy and comfortable," dates from this time. He was always keenly interested in the problem of London traffic, and prepared several improvement schemes dealing with this question. Mr. Lanchester leaves a widow and a family of eight sons and daughters. His eldest son is at present a Vice-President of the Institute, and another is well known as a motor engineer and inventor.

Francis Leon Pither, *Licentiate*, who died 17th December 1913, at his house, 91 Tollington Park, N., was one of that body of competent artists whose work, not being of a public character, is little known. Mr. Pither was born in 1853, and studied at the South Kensington and Royal Academy Schools, where he was awarded the Queen's Prize and R.A. Silver Medal. The study for the latter medal he recently presented to the Victoria and Albert Museum. He was articled to Mr. Henry Jones Lanchester, and was afterwards Assistant to Mr. R. Phené Spiers and Messrs. Goldie and Shield and other architects. He started practice in 1876, and from that year until 1913 had been a visiting master at University College School. In 1901 he was appointed an Examiner in advanced perspective to the Board of Education, and in 1908 Examiner in Building Construction, etc., to the London Chamber of Commerce. His principal works were country houses and business premises, mostly in North London. Shortly before his death he was completing the

plans for a block of buildings to be erected in Mortimer Street, W., the front elevation of which was to be faced with faience work. The designs gave promise of a building of unusual interest.

The death is regretfully recorded of Mr. James Charles Tanner, Chief Clerk of the Institute. Mr. Tanner had been in ill-health for some two years, suffering from pulmonary consumption, and he died in Brompton Hospital on Tuesday, the 13th instant, five days after admission. He was forty-three years of age, and had been in the service of the Institute for over twenty-eight years.

MINUTES. V.

Adjourned Special General Meeting: Registration.

At a Special General Meeting (adjourned from the 1st December 1913), held on Monday, 5th January 1914, at 8 p.m.—Present: Mr. Reginald Blomfield, A.R.A., in the Chair; 62 Fellows (including 22 members of the Council) and 117 Associates (including 5 members of the Council)—the Minutes of the Meeting held 1st December 1913, having been published in the JOURNAL [6th December 1913], were taken as read and signed as correct.

The President drew the attention of members to the fact that the information asked for in the amendment discussed at the previous Meeting had been fully given in the JOURNAL for the 6th December.

The President announced that Mr. S. Douglas Topley [A.] had asked to be allowed to withdraw his amendment [see Minutes, JOURNAL, 6th December], and the sense of the Meeting being taken on the point was declared in favour of withdrawal.

The President further announced that notices of amendment to the resolution then before the Meeting had been received from Sir Aston Webb and Mr. Topley, and that the former, having priority of date, would be taken first.

Sir Aston Webb, K.C.V.O., C.B., R.A. [F.], moved as an amendment that the Council be authorised to prepare, and to submit for the approval of the General Body, a Petition for presentation to the King, praying his Majesty to grant a new Charter containing such further privileges and powers as are required to promote effectively the advancement of Architecture by enabling the Royal Institute of British Architects to register and to distinguish persons qualified to practise.

The amendment was seconded by Mr. G. Leonard Elkington [A.], and speeches in support thereof were made by Mr. C. Stanley Peach [F.], and against by Messrs. S. Douglas Topley [A.] and G. A. T. Middleton [A.], whereupon the amendment, having been voted upon and carried by a large majority, was put to the Meeting as the substantive motion, and it was

Resolved, *nem. con.*, That the Council be hereby authorised to prepare, and to submit for the approval of the General Body, a Petition for presentation to the King, praying his Majesty to grant a new Charter containing such further privileges and powers as are required to promote effectively the advancement of Architecture by enabling the Royal Institute of British Architects to register and to distinguish persons qualified to practise.

Mention having been made of Mr. Middleton's motion on the agenda for the Meeting of the 12th January urging the Institute's support of a Bill for the Registration of Architects proposed to be introduced into Parliament next Session, Mr. Middleton stated that under the circumstances he should refrain from bringing forward his motion.

The proceedings closed, and the Meeting separated at 9.30 p.m.

Business General Meeting: Consideration of Revised Schedule of Charges.

At the Fifth General Meeting (Business) of the Session 1913-14, held on Monday, 12th January 1914 at 8 p.m.—Present: Mr. Reginald Blomfield, A.R.A., *President*, in the chair; 36 Fellows (including 23 members of the Council), 24 Associates (including two members of the Council), and two Licentiates—the Minutes of the meeting held 15th December 1913 were read and signed as correct.

The Hon. Secretary announced the decease of Henry Jones Lanchester, elected Associate in 1874, Fellow in 1903, and placed on the list of Retired Fellows in 1908, and it was resolved that a message of sympathy and condolence be addressed on behalf of the Institute to his son, Mr. Henry Vaughan Lanchester, Vice-President R.I.B.A.

The decease was also announced of John Honeyman, of Glasgow, elected Fellow in 1874, resigned 1901; Robert Douglas Sandilands, of Glasgow, *Fellow*, elected 1906; and Francis Leon Püher, *Licentiate*.

The following candidates were elected by show of hands under By-law 10:—

AS FELLOWS.

CRAIK: David McLeod [S. 1896, A. 1900], Singapore.
HARRIS: Emanuel Vincent [S. 1897, A. 1900].
WISE: Henry James [A. 1895].

AS HON. FELLOW.

MILNER, Viscount, G.C.B., Hon. D.C.L. Oxon., LL.D. Cantab.

The Secretary announced that by a resolution of the Council under By-law 22 the following gentlemen had ceased to be members of the Royal Institute—viz., James Garry and Henry Lord, of the class of Fellows; Richard Adolphus Cane, Vincent Corbet Cook, Harry Jefferis, William David Jenkins, Herbert William Mole, Arthur Hill Morgan, Ernest Godfrey Page, Francis Fitzadelm Perse, Edward Reid, and Thomas Henson Robinson, of the class of Associates.

The Hon. Secretary announced the receipt of a number of works presented to the Library [see *Supplement*], and a cordial vote of thanks was passed to the donors.

The meeting then proceeded to the consideration of the Revised Schedule of Charges, and the Secretary read the Minutes of the Special General Meeting of the 16th June 1913 [see *JOURNAL*, 28th June 1913, p. 616], when the document was last under discussion.

The Secretary read a letter from Mr. Horace Cubitt [A.] questioning the accuracy of the Minutes in declaring as carried Mr. Delissa Joseph's amendment, alleging that the number of members present when the vote was taken fell short of the quorum required by By-law 67.

Mr. Cubitt, rising at the invitation of the Chairman, intimated that he had no wish to press the point, but in view of the importance of the question involved there ought to be no uncertainty as to whether the amendment was properly carried or not.

The Chairman ruled that the proper time to have challenged the figures was at the meeting itself, and that it was too late afterwards to raise the point.

The Minutes were then put to the meeting and confirmed.

Proceeding to the consideration of Clause 1 as amended at the previous meeting—viz., "That the Council's Schedule in Clause 1 be adopted in principle, subject to the totals being stated at a flat rate in each case at the nearest round figures, in the same manner as in Ryde's Scale"—it was resolved, on the motion of Mr. Maurice B. Adams [F.], seconded by Mr. W. Henry White [A.], that the figures agreed to at the previous meeting as set out in accordance with Ryde's Scale be reaffirmed.*

Mr. Greenop having raised a question as to the wording of the clause, the Chairman ruled that the advice of the Institute solicitors would be taken as to the precise phraseology of the Schedule, and that the Meeting should confine itself to the settlement only of facts.

A motion by Mr. J. P. Bishop [A.], seconded by Mr. Edmund Wimperis [F.], that any alteration made by the solicitors should be brought up for confirmation at a General Meeting of the Institute, and that the solicitors should be present to explain the reasons for the alteration, was negatived—9 voting for, 29 against.

A motion by Mr. S. Douglas Topley [A.], seconded by Mr. H. P. Burke Downing [F.], to omit from Clause 1 the paragraph "(a) The fee for all intermediate sums of cost to be in accordance with the above scale," was negatived—13 voting for, 20 against.

A motion by Mr. H. D. Searles Wood [F.], seconded by Mr. H. P. Burke Downing [F.], to omit "(b) The fees for any additional works executed under the same contract or order are charged at the percentage rate fixed by the graduated scale applicable to the original contract or order," was negatived, and the paragraph agreed to as printed.

With regard to the new clause following Clause 1 the Meeting agreed that it should be amended so as to read as follows:—"Should it be necessary, in the opinion of the architect, to retain the services of a consultant for any part of the work, the separate services rendered by him shall be paid for by the client."

As regards Clause 2, where the percentage to be paid was left blank, it was agreed to insert the words "to be agreed upon" in place of "namely, per cent.," and the clause was passed as follows:—"When several distinct buildings, being repetitions of one design, are erected at the same time from a single specification and one set of drawings, and under one contract or order, the above percentage for the above services is to be paid on the total cost of one such building, and a reduced percentage, to be agreed upon, is to be paid on the total cost of the others; but this arrangement does not apply to the reduplication of parts in one building undertaking, in which case the full remuneration is to be paid on the total cost."

In Clause 3 a similar amendment was made and the Clause agreed to as follows:—"In the case of alterations of and additions to existing buildings and in works in which designs for fittings, appointments, decorations, or elaborate detail or construction are main features, a higher percentage, to be agreed upon, on the total cost is to be paid for the above services."

The meeting adjourned at 10.15 p.m.

* Copies of the scale in accordance with Mr. Delissa Joseph's proposal were handed to members at the opening of the Meeting.



LONDON TRAFFIC PROBLEMS.

By COLONEL SIR HERBERT JEKYLL, K.C.M.G.

Read before the Royal Institute of British Architects, Monday, 26th January 1914.

WHEN the Institute honoured me with their invitation to address you on the subject of London Traffic I had some hesitation in accepting, owing to the difficulty of finding anything new to say. The whole subject was dealt with exhaustively by the Royal Commission, which reported in 1905, and since then the London Traffic Branch of the Board of Trade has, for six consecutive years, issued an Annual Report, the last of which appeared about a fortnight ago. There is, therefore, little or nothing to be said that has not been said before, and I cannot hope to do more than touch briefly upon some branches of the subject which appear to me to be of special importance at the present time. I propose to confine myself mainly to the time which has passed since 1901, when, as Railway Secretary of the Board of Trade, I first had to do with matters connected with London traffic; and to consider the changes that have taken place in that period, the forces which are still at work, and the direction in which they seem to point.

The amazing growth of traffic which has taken place in the course of the last few years may be illustrated best by figures. In the year 1892 the total number of journeys taken in Greater London on local railways, tramways, and omnibuses amounted to 562 millions; in 1902 the number had risen to 911 millions, and in 1912 it had reached the astounding total of 1,786 millions. In the first of these ten-year periods the increase had been 62 per cent., and in the second no less than 96 per cent. The figures, large as they are, do not represent the whole of the movement of passengers in public conveyances, as they take no account of cabs or of the suburban traffic of the trunk railways, for neither of which are figures available. A recent estimate puts the cab traffic at 50 millions, and the railway suburban traffic at 250 millions, so that the total number of journeys in public conveyances of all kinds must have been well over 2,000 millions in 1912. The increase cannot be accounted for by the growth of population, since the Census Returns show an increase of less than 17 per cent. between 1891 and 1901, and little more than 10 per cent. between 1901 and 1911. It is therefore evident that it is attributable to greater frequency of individual journeys, and this conclusion is borne out by the published figures, which show that the number of journeys per head of population advanced successively from 98 in 1892 to 136 in 1902, and to 244 in 1912. Adding the cab and suburban railway traffic, the number per head in 1912 cannot have been much less than 300.

I shall not have to trouble you with many more figures, because statistics of London traffic

are given in the Report of the Royal Commission, and, for later years, in the Annual Reports of the London Traffic Branch, where any who are interested in the subject will find them set out in full detail.

It is worth while, at the outset, to glance at the growth of London in modern times. In the early part of the nineteenth century the population increased slowly. The capacity of roads and waterways to supply the inhabitants of a small area with the necessities of life is limited, and, with the slow means of conveyance then existing, the limit had almost been reached. All that could be done was to improve the roads and provide additional bridges, and the numerous Acts of Parliament relating to roads in and about London point to the national importance that was then attached to them as a system, apart from the roads of the country at large. It is significant that, at this time, the efforts of the Legislature were directed to bringing the whole of the main roads, in what is now known as Greater London, under the control of a single body, and this desirable measure was on the point of being carried into effect when the whole aspect of the question was altered by the introduction of railways. Attention was at once diverted from the roads, which became of less and less importance as the railway system developed, with the result that they were left to the divided control of local authorities, under which they remain to the present time. London grew apace as soon as the railways had become firmly established. They provided the means of sustaining a larger population by drawing upon the resources of the whole country; they induced people to come to London by the facility which they offered for movement to and fro; and in course of time they developed the latent possibilities of the suburbs as places of residence by making them easy of access from the centre. Without railways London could never have reached its present size, and it is not too much to say that modern London owes its creation to them. It is true that wealthy people were able to live at some distance from the centre of the City—witness the fine old houses which still exist in such places as Clapham, Dulwich, Roehampton, and Hampstead; but even 100 years ago it was not uncommon for the City magnate to live over his counting-house, and in any case a suburban residence was the luxury of the few, while the bulk of the population had to live, not only in London, but in close proximity to their work. While the development of Outer London, which began to take effect about the middle of the last century, was the work of the railways, internal communication continued to advance up to the end by the gradual improvement of the old horse vehicles, and the addition of underground railways, steamboats, and tramways. Large areas both within and without what is now the County of London were covered with houses, and, to all appearance, expansion might go on indefinitely. Unhappily the new areas were not developed in conformity with any general plan, and the old evil of unregulated expansion, which lies at the root of the traffic problem, was allowed to go on unchecked. Had the difficulties which beset the question been foreseen, as they might well have been, and had timely provision been made for the needs of the future during a period of great building activity, the problem which confronts us now would have been comparatively easy to solve.

The conditions which prevailed fourteen years ago are well within the recollection of most of us. The suburban traffic was practically a monopoly of the railways; and internal communication was provided for by horse-drawn cabs, omnibuses, and a few tramways, in addition to the Metropolitan and District Railways worked by steam, with trains neither numerous nor fast, pervaded with dirt and poisonous fumes, and the two earliest electric railways, the City and South London and the Waterloo and City. The beginning of the present century was to see the commencement of a new era in traffic. The Central London Railway, which had been opened in 1900, was quickly followed by other tube railways; the Metropolitan and District lines were converted from steam to electricity; horse tramways were electrified, and the whole

tramway system both within and without the County of London was extended ; while mechanical omnibuses and cabs took the place of the old horse vehicles. These and other changes, accompanied as they were by services greatly improved in convenience, frequency, and speed, and by a general lowering of fares, brought about a complete revolution in the conditions of traffic, and account fully for the unprecedented increase to which I have already referred as having taken place in the course of the last ten or twelve years. The public are not slow to take advantage of improved facilities, and these are now so good that in no city in the world is travelling so comfortable, speedy, and cheap as it is in London, while the annual saving in the time of the community, if it could be stated in terms of money, would be found to amount to an enormous sum. Meanwhile large incursions were made into the suburban preserves of the trunk railways, and tramway and omnibus routes have been lengthened to such an extent that not only has the number of passenger journeys doubled in little more than ten years, but their average length has increased considerably, while many new routes, formerly untraversed by public conveyances, have been opened for traffic. One of the results of all this may be seen in the activity of building operations in parts of the Metropolitan area which had not previously been available for residential purposes owing to the lack of convenient access.

It was not to be expected that changes of such magnitude as those to which I have alluded could be accomplished without much disturbance and injury to pre-existing interests. Omnibuses lost much of their traffic to the underground railways and to the tramways, which, indeed, swept them out of South London ; the trunk railways lost millions of passengers every year to the tramways ; horse cabs were driven out by the more efficient mechanical cabs ; the old underground railways suffered from the competition of the newer tubes ; and every change in any part of the whole transportation system affected every other part in a greater or less degree. Latterly the changes have been in the opposite direction. The tramways, which at one time carried everything before them, have, in their turn, begun to suffer ; omnibuses, which had been brought to the verge of ruin, have regained much of their former prosperity ; and one railway company has recovered its suburban traffic by substituting electric for steam working, while others, encouraged by its example, are preparing to follow suit. The public is the final arbiter in the competition between rivals, and naturally gives the preference to the particular kind of conveyance which happens to suit it best. The gain of one is, however, not always the loss of others, since every improvement in facilities creates new traffic, and the total volume, so far from being a fixed quantity, is constantly growing. The change which has taken place in London travelling has not been confined to improvement in the instruments of locomotion ; improvements equally great have been made in organisation and administration. A few years ago there was fierce competition not only as between railways, tramways, and omnibuses, but even among themselves. Up to a certain point the public benefit by competition, but when competition and the cutting of fares has been carried so far that the whole industry of transportation becomes unproductive, enterprise is checked, and the community lose the benefit of extended facilities which they might enjoy could such extensions be provided without loss. This is what actually happened ; the benefit of cheap travelling was being purchased at too high a price, enterprise was discouraged, railways ceased to be constructed, and had this state of things continued the public must have suffered either by the curtailment of facilities or by a general increase of fares, since transportation can no more be carried on at a loss than any other business. Attempts to bring about co-operation among the various competing agencies met with very limited success, and it soon became evident that the only real remedy was an amalgamation of interests, which would put an end to the disastrous competition which had hitherto prevailed. The policy of amalgamation, which began in a small way among the omnibus companies, has happily been carried into effect, to the greater advantage of the

travelling public, and also of the whole traffic of London. The improvement is especially marked in the service of omnibuses, for so long as a number of independent companies were competing with each other for the same traffic they were all compelled to confine their operations to comparatively few remunerative routes, upon which more vehicles were run than were really required, while none could afford to provide services which did not promise an immediate return. Now that the whole have been brought under common control superfluous omnibuses have been suppressed, there being no inducement to run more than are actually wanted, and the congestion of busy routes has thereby been relieved, while it has been possible to extend the field of operation very largely, and to open up new districts hitherto served imperfectly or not at all. It has further become possible to co-ordinate the various forms of transportation. In a city as large as London there is room for every kind of conveyance, but it is not desirable that all should compete for the same traffic over the whole area. Such unrestricted competition leads to needless duplication and loss to all. Railways, tramways, and omnibuses all have parts of their own to play, and although overlapping cannot be avoided, the aim should be to confine each, as far as possible, to its own peculiar field. Generally speaking, railways are the best for carrying large numbers at high speed for long distances, tramways for dealing with heavy suburban traffic, and omnibuses for light suburban and pick-up traffic. In all large cities there are two kinds of passenger traffic—one comprising short journeys between different points, and the other comprising journeys between the centre and the residential suburbs, the difference between them being that the first is continuous throughout the day and far into the night, while the second is intermittent and restricted to comparatively short periods in the morning and evening. Outside the nearer suburbs which are served by all three this morning and evening traffic is the peculiar province of the railways, since no other kind of conveyance can rival them in point of speed. People who come up to London every day measure distance by time and not by miles. The number of those who are willing to undertake two daily journeys of anything up to an hour is increasing every year, and the further they can be carried in the time the further they will go. The railway companies are alive to the importance of catering for a class which yields them a steady revenue from season tickets; they have already done much to improve the outer suburban service, and it is probable that further developments will take place in this direction in the near future. The large companies are less favourably placed for serving the nearer suburbs, partly because they are exposed to competition, and partly because the heavy suburban traffic tends to block the terminal sections, and thereby to impede the arrival of trains coming from greater distances. Moreover, the railway termini are not always the points to which passengers want to go, though this drawback is now met to a great extent by the underground railways, which serve to distribute them to their ultimate destinations. Though naturally reluctant to give up any portion of a traffic which they have built up at great cost in the provision of stations and other works, it would not be surprising if they should find it to their advantage to curtail facilities for short journeys and to concentrate their energies on the wider field in which their supremacy is unchallengeable. The directions in which improvements are to be looked for are the separation of suburban from long-distance traffic, the electrification of suburban lines, the shortening of journey times, the increase of accommodation in the rush hours, and the extension of urban railways into rural districts. Such changes would be of special interest to architects, inasmuch as they could not fail to stimulate building in the outer suburban area.

In regard to internal communication, where there must always be competition, there is little difference in respect of fares, and, apart from individual preferences for particular kinds of conveyance, the main consideration is time. The effect of weather is not inconsiderable, but, as a rule, people will take the most expeditious means of getting to their destinations.

For the longer distances the electric railways have a decided advantage in this respect, and the interchange of traffic among them has been so improved that it is possible to travel all over London with surprising rapidity. It is much to be regretted that the underground railways were promoted as separate undertakings. Much has been done to improve their inter-working, and further improvements may yet be made; but had they all been designed from the first as one system, like the underground railways of Paris, better arrangements might have been made for the interchange of traffic, and vast sums of money, spent in promotion and construction, might have been saved.

One of the greatest benefits which underground railways confer upon the community is the relief which they afford to the overburdened streets. It is not so much that the volume of surface traffic is any less than it was—on the contrary, it is increasing from year to year, even in streets like Oxford Street and Holborn, which are immediately over the Central London Railway—as that, could such a thing be imagined as a suspension of underground traffic, congestion would become intolerable, as it would entail the addition of at least half a million a day to the number of people using the main thoroughfares. It follows that the real effect of underground railways is not so much to diminish the traffic in the streets as to permit the movement of millions of people, who without them would not be able to move at all. In some respects underground railways actually increase the number of people in the streets owing to the facility of access which they afford to the centre from the surrounding suburbs. It has become so easy to reach the principal commercial districts that many who formerly depended upon shops in their own neighbourhoods now do their business in the centre of London; so that, while the population itself tends to move outwards, the tendency of commerce is to become more and more concentrated in the centre. For this reason the conversion of residential into business premises, which has already made considerable progress, is likely to continue, if not to increase.

I do not propose to discuss the relative merits of tramways and omnibuses, which have been the subject of acute and heated controversy. In my opinion there is room for both. The tramways of London have been of inestimable benefit, especially to the poorer part of the community, in promoting the outward movement of the population, contributing thereby to the solution of the housing problem; but it does not seem probable that any material addition will be made to their existing mileage in present circumstances. They would be of still greater utility if they could be worked under conditions approaching more closely to those of railways; but this could not be done in the central area without street widenings on a scale sufficient to give them tracks of their own independent of the ordinary road traffic.

The question of housing is bound up inseparably with transport. So long as locomotion was slow and dear the population was necessarily concentrated, and this concentration resulted in overcrowding, bad and insanitary dwellings, and the innumerable evils which these conditions entail. This has all been changed by the recent improvements in the means of locomotion, one of the principal effects of which has been to enlarge the area available for the housing of the people. They are no longer compelled to herd together in a limited space. Better houses at lower rents and in healthier surroundings are now open to those who previously had no choice, and among other advantages conferred by cheap and rapid transport working people can now enjoy the benefit of fixed homes instead of having to follow their work from one part of London to another.

The movement of population outwards from the centre which has taken place in the last ten or twelve years is attributable directly to the increase of facilities for movement which has occurred in the same period. It is clearly reflected in the returns of the last Census which, for the first time in more than a century, show an actual decrease in the population of the County of London, accompanied by an enormous growth in the population of the Outer Ring.

We are still only at the beginning of this shifting of population, but there is every reason to hope that it will continue at an accelerating rate as the people come to realise the advantages which are now within their reach. The movement, caused in the first instance by better communication, further increases the demand for the latter. They act and react upon each other, since the more and the further people move outwards the greater becomes the need for means of locomotion. To take a single instance, the extraordinary development that has taken place in the neighbourhood of Golder's Green is entirely due to the Charing Cross and Hampstead Railway, and could not have occurred without it. This is only one out of many, for the same thing is happening in other directions, not only in the immediate neighbourhood of London, but in places as far distant as Southend, where the growth of population has been phenomenal owing to the enterprise of the Tilbury Railway in providing a service of trains suitable to the requirements of business men. The only limit to such expansion is the capacity of the railway to carry the people. A point which should not be overlooked in this connection is the necessity for preserving open spaces in localities which are becoming rapidly developed. The greatest care should be taken to avoid building up new areas in such a way as to reproduce, even approximately, the horrors of the slums. The example of the Essex boroughs is one to be avoided, and although the Building Acts and By-laws are sufficient to prevent a repetition of the worst evils with which we are too familiar, something more is required, and wherever building is active steps ought to be taken, while there is yet time, to secure the maintenance of open spaces of large extent.

So far I have confined my remarks to matters connected with the movement of people. I now add a few words on the no less important movement of goods. Here there are no statistics to guide us, and there are no means of ascertaining what changes have taken place in recent years. There is, however, no reason to suppose that goods traffic has increased to anything like the same extent as passenger traffic. In some respects it has diminished, as, for instance, in such articles as forage and manure, of which much less is carted through the streets now than ten years ago. In central London it is probable that the cartage of building materials has diminished, while that of shop goods has increased. Goods traffic is slower than passenger traffic, and is, consequently, more obstructive, though some of the lighter classes of goods are now conveyed in motor vehicles, and the use of such vehicles is increasing. This is all to the good, since it is the heavy slow traffic which makes the difficulty, added to the obstruction caused by vehicles waiting to be loaded and unloaded. Prominent among many suggestions which have been made for relieving the streets by reducing the volume of carted goods is one for the establishment of a central station or clearing house, connected with all the railways, where goods of all descriptions could be received, sorted, and despatched. The project appears to have been worked out in great detail, and if the merits claimed for it are capable of being realised the promoters ought to have no difficulty in obtaining statutory powers and the large amount of capital required to carry it into effect. It is, however, a question for experts, and I am not aware that any expert in the handling of goods traffic has pronounced in its favour. It is understood that the Post Office are about to construct an underground railway for the conveyance of parcels and mails between some of the principal offices and railway stations. The removal of mail vans from the streets will be a sensible relief, and the project may serve as an object-lesson which might lead to further enterprise in the same direction.

I now come to a part of the subject which is perhaps of more importance than any other at the present time—namely, the Roads. Nine years ago the Royal Commission pointed out that the main cause of the difficulty of the London traffic problem was the narrowness of the streets and the fact that they were not laid out on any plan, London having been allowed to grow without regulation or thought for the future. It is needless to labour the point, because the

fact is universally admitted, and it only remains to consider what can be done to remedy the defect. For this purpose it is convenient to deal separately with central and outer London, since the conditions which apply to the two areas differ materially. In the centre, comprising the greater part of the County of London, the ground has been built upon so closely that nothing can be done short of widening existing streets or making new ones. The cost of such operations would be so large that they could only be carried out by persistent effort spread over a long series of years, and in order that they should have the best effect it is essential that they should conform to a definite plan, laid down in advance, and worked up to by degrees. Much has already been done towards the widening and making of streets by the London County Council, their predecessors, the Metropolitan Board of Works, the Corporation of the City, the Metropolitan Borough Councils, and private landowners, including the Crown, whose contributions towards the improvement of communication have hardly received sufficient acknowledgment; but so far all improvements have been isolated and fragmentary, designed to meet pressure at particular points rather than to form parts of a general scheme. In this respect London stands alone, for in all other great cities where the same difficulty has arisen through traffic outgrowing the capacity of the streets the first step towards improvement has always been to prepare a plan. It is characteristic of the national temperament that we should proceed from hand to mouth instead of taking a long view of the situation. It was in this way that London grew up, and it is largely to this haphazard procedure that the difficulties which now confront us are attributable.

Of the two methods of effecting improvement, the construction of new streets is generally preferable to the widening of old ones. Both operations are costly; but the former causes less interference with traffic, and gives greater relief in the end by providing alternative routes; it also permits the construction of underground subways for pipes and wires, and even for the passage of tramcars, which are most difficult to make in old streets owing to the network of obstructions which are always found in such situations. It is not, however, desirable to undertake the construction of any great length of new street at one time, as it takes many years for a new street of considerable length to fill up, and in the meantime the capital cost of the site is lying idle, whereas short lengths are apt to be built up more quickly.

Additional and wider bridges are also one of the pressing requirements at the present time, in particular a road bridge with approaches to connect Charing Cross with St. George's Circus—two out of the three greatest traffic centres in London; and a new bridge to take the place of Lambeth Bridge, which, though still standing, has been condemned as unsafe for anything but pedestrians. If such a bridge were built, and continued by a new street to the neighbourhood of Victoria Station, it would relieve Victoria Street and Westminster Bridge, and would give direct access from Pimlico to the City by way of the new bridges which the Corporation are about to construct. The whole subject is one of especial interest to architects, inasmuch as there can be no greater ornament to a city than a fine bridge. The design of such structures has come to be regarded as the almost exclusive concern of engineers, though an architect may be called in to invest it with some degree of artistic merit, which, of course, is a hopeless task. I venture to think that the process should be reversed, and the design left to the architect, with such assistance as he may require from the engineer. It is not often that the qualifications of both professions are to be found in combination as they were in the person of Sir Christopher Wren, and it is tantalising to think what a monument we might have had if it had fallen to his lot to design a great bridge.

Necessary as it is to widen the principal thoroughfares or to add to their number, something might be done, at comparatively small expense, to increase their capacity. If a careful survey were made of each street it would often be found that obstructions might be

removed, that the widths of carriage-way and foot-ways might be readjusted, and that a number of improvements might be made which, though small in themselves, would, when taken together, make an appreciable addition to its effective capacity. The greatest of all obstructions are the centre lamp-posts which extend throughout the whole length of some of the busiest thoroughfares. They are even more pernicious than they appear to be, for, although not wide, there is always a margin on each side within which no vehicle will pass, while the intervals between them are so short that little use can be made of the spaces between them. These are often occupied by cab ranks, so that practically a strip in the centre of the roadway is thrown out of use, and the remainder is divided into two. It is sometimes claimed as an advantage that there should be a physical separation of traffic passing in opposite directions, and there would be force in the argument if the up and down traffic were equal in volume. This, however, is not the case, since the up traffic is heavier than the down at one time of the day and lighter at another, so that one side is nearly always more congested than the other. If the centre standards were removed a substantial addition would be made to the width of the roadway, the varying volumes of up and down traffic would adjust themselves to the width of the road, and fast vehicles would have less difficulty in passing the slow. Their retention is the less excusable, because the advantages of central lighting can be had without them. In the City and in foreign towns—especially Berlin—the lamps are suspended from the sides of the streets, and there is no apparent reason why the same thing should not be done elsewhere, provided that the width is not too great.

While the greatest need of central London is increased width of the principal thoroughfares, it is to be observed that the mischief is done, and that it can only be cured by a slow and costly process. In outer London, on the other hand, the mischief has not gone so far, but it is growing rapidly, and we may see to-day with our own eyes the progress of the very same evil which has been the cause of all our difficulties, leading inevitably to the same result, and laying up untold expense for future generations. It is surely incumbent upon us to take warning from the experience of the past, and to take steps, while there is still time, to arrest the mischief which is going on, and so to avert the recurrence of difficulties which are bound to come if matters are suffered to drift. The first step is to ascertain what amount of road accommodation is required, and what are the best lines for such new roads as may be needed. I would observe here that the number of main roads leading into London is too small, having regard to its great size. Paris, with a population only half as large as that of London, has twice as many outlets, which it owes to the wise forethought of the French Government. More than a century ago a plan was adopted for the expansion of the city, drawn up by a Commission which included architects and other artists among its members, and this plan, modified from time to time, in accordance with changing conditions, has been adhered to ever since. The outlets of London are not only too few in number, they are for the most part too narrow as well. They are, in point of fact, the roads which have existed for centuries, and no material addition to them has been made for more than eighty years. The making of new roads is beset with difficulty, because so much of the ground has been occupied by buildings, railways, waterworks, and other obstacles that the discovery of a new line of approach is no easy task. It is comparatively simple to ascertain the general line which a new road ought to take, having regard to the volume of traffic seeking an outlet in a particular direction; but it is a matter of the utmost difficulty to fix its precise location when the matter comes to be dealt with in detail, with due consideration for topographical features and obstacles of different kinds. The Ordnance Maps can be used to a large extent, but they require constant revision, and the final working out can only be done upon the ground. Colonel Hellard, who has been engaged upon this work for the last three years, has examined the whole of the ground with the greatest assiduity and patience,

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TOWN PLANNING SCHEMES

(Outside the County of London)

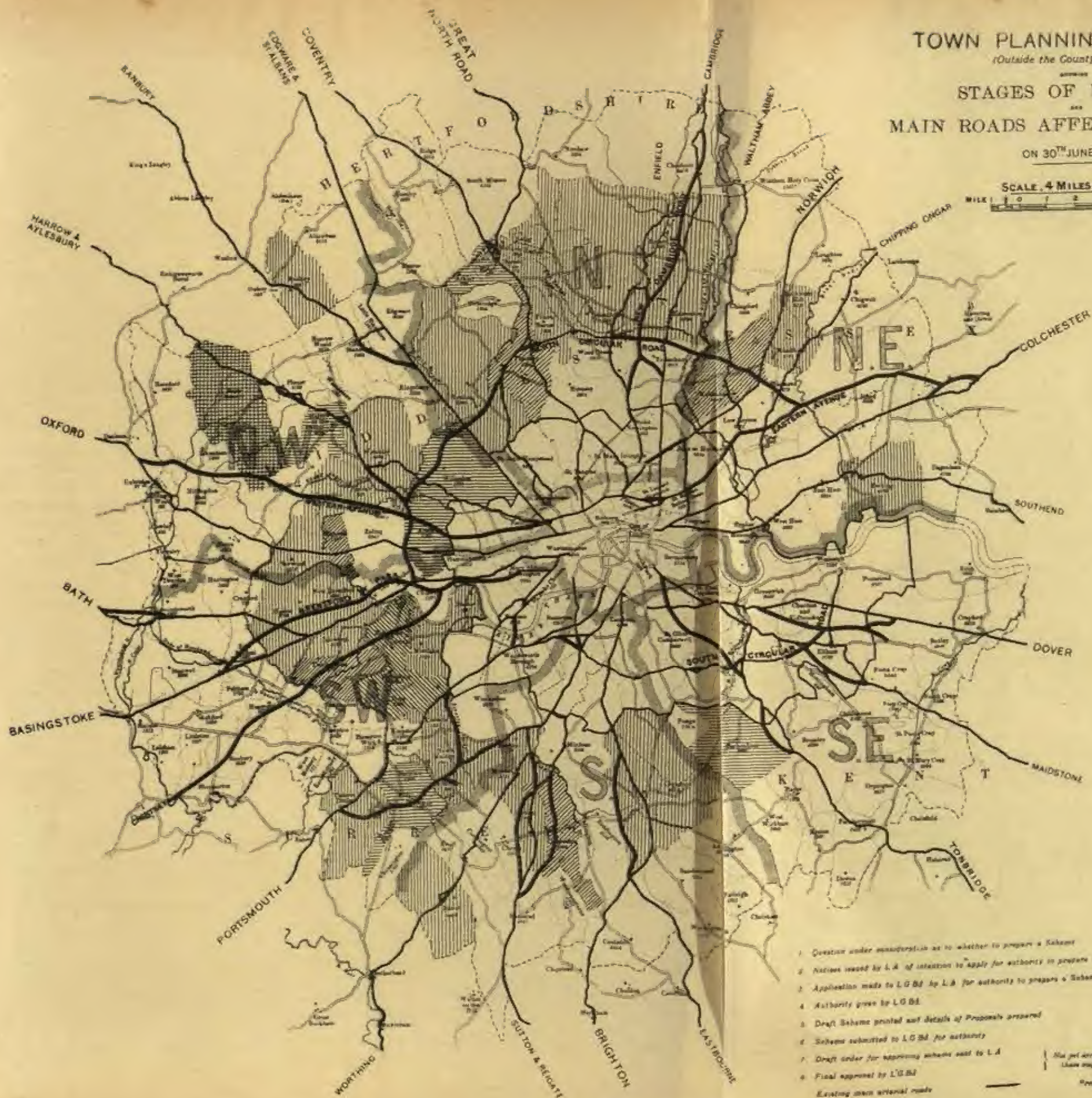
STAGES OF PROGRESS

MAIN ROADS AFFECTED THEREBY.

ON 30TH JUNE 1913.

SCALE, 4 MILES TO 1 INCH

MILE 0 1 2 3 4 5



1. Question under consideration as to whether to prepare a Scheme
 2. Notice issued by L.A. of intention to apply for authority to prepare a Scheme
 3. Application made to L.G.B. by L.A. for authority to prepare a Scheme
 4. Authority given by L.G.B.
 5. Draft Scheme printed and details of Proposals prepared
 6. Scheme submitted to L.G.B. for authority
 7. Draft order for approving scheme sent to L.A.
 8. Final approval by L.G.B.
- Existing main arterial roads
- Proposed new main roads

MAIN ROADS AFFECTED THEREBY STAGES OF PROGRESS TOWN PLANNING SCHEMES

(Within the County of London)

ON 30TH JUNE 1933

SCALE 4 MILES TO 1 INCH



- 1. Districts within the County of London in which the schemes are proposed.
- 2. Districts within the County of London in which the schemes are proposed.
- 3. Districts within the County of London in which the schemes are proposed.
- 4. Districts within the County of London in which the schemes are proposed.
- 5. Districts within the County of London in which the schemes are proposed.
- 6. Districts within the County of London in which the schemes are proposed.
- 7. Districts within the County of London in which the schemes are proposed.
- 8. Districts within the County of London in which the schemes are proposed.
- 9. Districts within the County of London in which the schemes are proposed.
- 10. Districts within the County of London in which the schemes are proposed.



and has produced the plan which is now exhibited to you. The new roads shown upon this plan represent the least that will be required both to afford reasonably free communication between London and the surrounding districts, and to furnish proper access to localities suitable for development as building areas. The proposed roads are of three kinds—(1) radiating main roads, (2) encircling roads connecting with (1) and making it possible to pass through London without traversing the crowded centre, and (3) by-pass roads, avoiding certain places where traffic is abnormally congested. The aggregate length of proposed new roads is 117 miles, which, with the addition of 32 miles of existing roads, widened and improved, makes a total of 149 miles. The cost of all this will not be small, but these or similar roads will have to be made sooner or later, and it is certain that the longer their construction is deferred the costlier they will be. There is no necessity for making them all at the same time, but it is most desirable that steps should be taken to acquire land before it is developed, so that the additional cost of purchasing and removing buildings may not have to be incurred.

Main roads should not be less than 100 feet wide—a width which has been adopted as the standard for new roads in the neighbourhood of Liverpool. In fixing this width it is not intended that the whole of it should be brought into use at once, but that no building should be allowed within 50 feet of the centre-line. When a new road is first laid out a metalled roadway of from 20 to 25 feet would generally be sufficient, but there must be room for widening to meet the growing requirements of traffic. Where the land is still open and could be purchased cheaply it would be desirable to secure a still greater width, so that it may be possible to plant avenues of trees. The cost of land in open country is not a heavy item, and it would be well worth while in such situations to seize the opportunity of making the approaches to London dignified and pleasant. If the width of new roads—especially such as radiate from the centre—were sufficient to admit of light railways on tracks of their own, apart from the roadway for ordinary traffic, such railways would assist materially in developing building areas, provided that the stopping places were far enough apart to admit of a high rate of speed. By this means passengers could be brought rapidly towards the centre, and could be distributed to their destinations from convenient points by any available means. It is desirable to have a number of independent radiating railways, because no one line can carry more than a limited number of people in the rush hours, and the difficulty of providing terminal accommodation becomes serious when the numbers to be dealt with are large.

In addition to the reasons already given for increasing the road accommodation in the outer Metropolitan district, there are two considerations which have an important bearing on the subject—namely, the growing use of roads by mechanical vehicles, and the action of local authorities under the Housing and Town Planning Act.

The number of motor vehicles is increasing rapidly, improvements and new inventions continue to be made, and additional uses continue to be found for mechanical transport of all descriptions. It is difficult to foresee where the movement will end, but it is clear that the use of the roads both for passengers and goods, which has increased so much in the last few years, is likely to increase much more in the near future. Simultaneously with this development of road traffic has come the improvement of the roads themselves. Year by year the roads are becoming better in every respect, and more suited to carry both heavy and light traffic. There can be no doubt that they are destined to play a far more important part in the economic life of the country than they have filled at any time since the introduction of railways.

The Town Planning Act has not been long enough in operation to allow of much progress beyond the preliminary stages; but a number of schemes are under consideration in the Metropolitan area, and some are approaching maturity. It is of the utmost importance that these schemes should include due provision for arterial roads before the plans are finally settled.

If each district lays out its roads independently, with no regard for anything but its own convenience, not only will nothing be done towards providing arterial roads, but the construction of the latter will become much more difficult. What is required is a central authority, with power first to lay down the lines of arterial roads, and, secondly, to require local authorities to make their schemes conform to prescribed lines which happen to traverse their areas. There is no reason to believe that such a measure of control would inflict any hardship upon the authorities concerned; on the contrary, by giving them all good communication with the centre of London it would prove the most effectual way of promoting their prosperity. They will have to make roads, in any case, and if some of these are laid out so as to form sections of arterial communication they will serve a double purpose. It is understood that the President of the Local Government Board is giving attention to this subject, and is endeavouring to bring about a common understanding by means of conferences of local authorities. It is to be hoped that voluntary action on the part of the authorities will lead to the desired result, and it is satisfactory to know that the matter is receiving attention and is in such good hands. It signifies little by what means the object is attained, whether by the creation of a central authority appointed *ad hoc*, or by the action of a Department of State. The important thing is that by voluntary agreement, if possible, or, in the last resort, by some measure of compulsion, the benefit of arterial roads should be obtained for the community at large. It must be a matter of satisfaction to the members of this Institute to know that they have taken an active part in impressing this important point upon his Majesty's Government.

There are many other topics on which I might have touched, but London Traffic is so large and intricate a subject that it is not possible to deal with all its ramifications in a reasonable length of time.

DISCUSSION.

The President, Mr. REGINALD BLOMFIELD, A.R.A., in the Chair.

COLONEL R. C. HELLARD, C.B., Head of the London Traffic Branch of the Board of Trade: I am glad to be called upon to move a vote of thanks to the Lecturer, for two reasons. One is a personal one, for when Sir Herbert Jekyll was my Chief, I always received every consideration and encouragement at his hands. The other is on the more general ground that some time after the Report of the Royal Commission on London Traffic had been issued, and enthusiasm on the subject of improvement of roads had begun to flag, we owe it to Sir Herbert that interest was once more thoroughly aroused in the matter. As regards the improvement of roads, it should be remembered that the road is in a totally different position from the railway. For the railway the money will always be forthcoming, so long as there is a chance of any return: it is a commercial enterprise which will pay. The road, on the other hand, is severely handicapped, for whoever provides the money for it must look for a poor return; it is almost a philanthropic business, for the benefit of others. This financial difficulty must be faced in course of time, and meanwhile you cannot keep this subject of the improvement of roads too much before the public.

MR. RAYMOND UNWIN [F.]: It gives me very great pleasure to say a few words in seconding this vote of thanks—which I am sure will be a very

hearty one—to Sir Herbert Jekyll, not only for his Paper to-night, but for the work he has done in bringing this important matter forward, and keeping it to the front at a time when it was liable to drop into the background after the excitement of the Royal Commission. As Sir Herbert has said, this subject is not new, and it is difficult to say anything new about it. I can only add a few points in illustration of those which Sir Herbert Jekyll has selected as most urgently needing consideration. It is the experience of those who have studied cities in this country and abroad, that there is a definite movement towards the concentration of business, which leads to commercial efficiency, in the centre of the town, and towards the distribution of the people and the homes of the people, which leads to physical efficiency, in the outskirts of the town. And that is creating more or less of a change in the character of towns, and is affecting, and being affected by, the character of transit. As Sir Herbert very aptly pointed out, the distribution of the people in this way depends entirely on transit, and the limits depend on the time taken in going to and fro between home and work. Sir Herbert has spoken of some of the detailed ways in which roads might be made more efficient. I think that perhaps a little more attention might be given to the amount of useless traffic in the streets, both passenger and goods traffic

Paddington, for instance, is four miles from Liverpool Street as the crow flies; King's Cross and St. Pancras are about two miles from Waterloo; yet the interchange of traffic between such stations by means of 'buses and cabs is very great, and leads to unnecessary congestion. The distribution of goods by rail is vastly cheaper than their distribution by road. At the present moment there is an inquiry going on in Chicago in connection with their railway termini and the re-arrangement of the railways. They can bring a ton of coals four hundred miles into the terminal for one dollar, yet it costs half-a-dollar to cart that ton an average of one mile to the consumer. Vast sums could be saved if goods could be brought nearer in the first instance. It has been calculated in Boston—and they go into these things carefully in American cities—that six million ton-miles per annum of carriage through the streets could be saved if all goods were delivered from the nearest terminal to the point they had to go to, i.e. if there was no cross delivery. That means, in money, £300,000—probably £500,000; it means 2,000 one-ton carts travelling ten miles each day uselessly in Boston. In London we have Covent Garden Market without communication either by rail or water; carting through the streets is the only means of transit. Coming to passenger traffic, it is cheaper to carry passengers express than by slow train. That has been proved, for instance, in the New York Underground, where they have express lines and slow lines parallel. They have worked it out so nearly that they find express trains are used and are efficient in the proportion of five to three for the slow trains. In order to remedy this, in the new line they are putting express stations further apart, so as to get a ratio of five to five in the two cases. London is the greatest city, but it is by no means the worst congested; the congestion in many other cities, notably New York, is greater. The Woolworth Building in New York, if it were to be emptied at once, would require thirty minutes for ten-car expresses running as fast as they could—that is, at 1½-minute intervals—to take away all the people from that building. Sir Herbert mentioned the great advantage we have in London through the removal of competition between the different 'bus companies, and I think we should have a still greater advantage if all the different kinds of traffic could be co-ordinated; so that the railways should carry, as Sir Herbert said, long-distance traffic, the trams the nearer suburban traffic, and the 'buses effect the detailed distribution of the street traffic. I was very pleased that Sir Herbert did not join in the somewhat thoughtless disparagement of the street railway or tram that has prevailed lately. I am afraid some Londoners are very provincial in their ideas! If they were to see the great cities of the world, and the degree to which they depend on street railways, running on roads which have been properly planned for them, often quietly and inexpensively on grass,

long distances without a stop because the intermediate roads are properly planned, they would not so lightly think that the 'bus was going to oust the tram. In the joint conferences of the local authorities which Mr. Burns has set up, we hope to see the beginning of the co-ordination of the whole traffic of London.

In making new main roads I would urge that we should not be too niggardly in regard to width. We have seen in the papers recently—I do not know whether it is true—that the Government are using pressure to prevent roads being made wider than 80 feet. Eighty feet is not enough to provide a central track for trams and tracks on each side, even for two up and down lines of vehicles, and we have now three definite speeds of vehicles—the slow horse, the trotting horse, and the fast motor. We need at least 86 feet to accommodate two lines of vehicles, and 98 feet as a minimum to give three lines each side of a central track for the street railway. And if you are to have room for tree-planting at intervals, you need 112 and 124 feet respectively. When you make a main road 120 feet wide instead of 80, in open land where you have not to clear away buildings, you are not destroying building land; you merely put your buildings 20 feet further back; economically, it is merely so much more agricultural land taken away from the margin outside London. Surely we can afford to make our few main roads in those cases of adequate width; there is not much danger of our going to the extravagant degree of general width to be seen in some Continental towns.

Roads are the corridors of our cities; they need planning and grouping, and dignified architectural treatment. And it is here that they interest the architect, not only because of the buildings which will grow up along them; the open spaces are our gardens, we need to have them disposed in an orderly way in connection with our roads. A city is a great organic unit, and we need a central authority, a head, thinking for the whole of that unit. And that is the power that we wish to see set up—a body able to co-ordinate the different influences and local authorities which are working each at some part or in some district. And such a body must have a plan as a guide. When we have secured these which Sir Herbert has so ably outlined for us, we shall have a basis for a fine development of London. I have great pleasure in seconding the vote, and in expressing our thanks as an Institute for the courtesy which has always been shown to us by Sir Herbert Jekyll and Colonel Hellard when we have approached them; and as a Town Planning Committee we have given them no small trouble in connection with our consideration of some of the roads shown on their map. We owe to Sir Herbert Jekyll and Colonel Hellard this bit of central thinking for London; it is the first bit of comprehensive thinking on the main roads of which we have had evidence; and

the Institute is especially grateful to them for this piece of work.

MR. SYDNEY PERKS, F.S.A. [F.]: We are all deeply indebted to the Lecturer for the way in which he has dealt with nearly every kind of traffic in London—horse traffic, passenger traffic, and goods traffic; the electric trams, the motor-buses, and the railways above and below the street. But there is one section of the traffic, and a very important one, which he has not touched upon at all, viz., the pedestrian traffic. It is a great benefit to us to travel quickly, but I doubt if many people realise the price the public pays for these increased facilities. I have here the Report of the Select Committee on Motor Traffic, ordered by the House of Commons to be printed and issued in August last year, and this is taken from it: "The number of fatal street accidents in the Metropolitan Police Area has multiplied three-fold in eight years. In 1904 there were 155 deaths, and in 1912, 537. The number of injured was doubled in the same period. In 1904, 10,384, and in 1912 over 20,166 people were injured in the streets." That is outside the City area. I am glad to be able to say that accidents and deaths have decreased in the City of London, for in 1907 there were five killed and 1,221 injured; and in 1912 the number fell to three killed and 588 injured. These figures show that the traffic is slower in the City, where there is so much congestion, and that the number of accidents has not increased according to the population; the danger zone is outside the City, where the speed is much greater. The Lecturer deprecated the refuges and the lights along the centre of the streets; but I think they are the very things we want. Anybody who doubts it should try to cross Piccadilly, in the dip, about 11.30 at night, when the cabs are going West from the theatres. It will take some time, and he will realise the wisdom of the little girl who was asked at Sunday School the difference between the quick and the dead, when she said, "The quick are those who get out of the way of motor cars"! I think the authorities are realising the great danger to the public. There should be more refuges in the West End. I was glad to see, on turning over the Report of the Traffic Commission, in paragraph 30: "Sir William Nott Bower reported that a ready response was made in the City to any request for refuges to be fixed, and the police found them most valuable for the safety of pedestrians, and for keeping vehicular traffic in proper lines." And the following is very important: "Your Committee are of opinion that street refuges are of very great service in ensuring the safety of pedestrians, and a useful means of diverting the currents of vehicular traffic." I think they are most useful, and when you have them you can do your lighting from them, which in a wide street is far preferable to slinging wires across and fixing them sometimes to old buildings. The perspective as you look down Cheapside with the mass of wires along the street

is not so pleasing as with standards placed along the centre. There is another point I would touch on. People often say in the City and West End, "Pull this building down and put the space into the traffic area," irrespective of whether it is wanted or not. But they do not realise how the ratepayer is hit by some of these improvements. He is hit in four ways. Imagine an important block of property in the City or the West End, the owners contributing largely to the rates. As soon as that block is demolished, the burden of rates which it used to bear has to be borne by all the owners in the district. Then there is the cost of acquisition: this is a heavy item, and has to be borne by the ratepayers. And when the site has been cleared, there is the cost of laying it out, which may be very great. Finally, there is the cost of maintenance of the open space, which is often considerable. All this is so obvious, yet it is often overlooked. Architects, too, have sometimes most ridiculous ideas. One architect said, "You know, St. Paul's Cathedral cannot be seen." I said, "No, it can't be seen very well." He said, "I have been very much impressed by Cathedrals standing in large open spaces, and I have a good scheme; I think the whole of the property on the North side of St. Paul's Cathedral, Paternoster Row and Newgate Street, should be cleared away." The property on the South side he proposed to pull down almost to the river. He would clear a few streets to the East, but would leave the property on the West. Of course, the idea was ridiculous. But I think we ought to give more attention to such open spaces as we do possess. Most of them are terrible "on plan." Charing Cross, for instance, has no form at all, and the recent improvements have added to the traffic problem; there are more difficulties in crossing, and the architectural form is worse than ever. The same may be said of the space in front of the Mansion House. The plan of Oxford Circus is correct, but Piccadilly Circus is terrible; three-fourths of the Circus are left, and one-fourth has disappeared. It reminds one of the Mock Turtle in *Alice in Wonderland*. "'Once,' said the Mock Turtle, with a sigh, 'I was a real Turtle.'" "Once," says Piccadilly Circus, with a sigh, "I was a real Circus"! The appearance of that mutilated space is sad in the extreme, and I hope something will be done in the near future to give it proper architectural form. If we get good architectural form for open spaces, it is much better for the regulation of traffic. The easiest traffic for the police to regulate is where a street crosses another at right angles, no matter how wide the street or how great the traffic. There is, for instance, enormous traffic along Cheapside, and King Street and Queen Street cross it at right angles, yet it is dealt with quite easily. But when you get an open space "without form and void," like Charing Cross and the Marble Arch, there are difficulties. I do not think the police always help the pedestrian in

the way they might. Hyde Park Corner is a dangerous crossing. Anybody going in an omnibus from Victoria, and wanting to get out on the north side of Piccadilly, where there is very little traffic, cannot do so; he has to get out at the triangular site by St. George's Hospital, or he is taken about 200 yards up Hamilton Place into Park Lane. Such police regulations do not favour pedestrians, and I maintain that they have a claim to be considered. I have greatly enjoyed Sir Herbert Jekyll's Paper, and support very heartily the vote of thanks.

MR. R. STEPHEN AYLING [F.]: I have much pleasure in supporting the vote of thanks for Sir Herbert Jekyll's Paper, in which he has dealt so ably with the question of London Traffic. But I hoped he would have gone more fully into the question of reducing the amount of London goods traffic, rather than increasing the width of the roads in order to accommodate the goods-vans and such-like vehicles which block the streets at the present time. As an architect I am wholeheartedly in favour of wide roads and wide thoroughfares, but I believe it is universally acknowledged that a wide road with a large amount of traffic is more dangerous than a narrower road with a proportionately smaller number of vehicles. The Lecturer stated that there are no statistics regarding the increase during recent years in the number of goods-vans which traverse the London streets. In the Report of the London Traffic Branch of the Board of Trade dated 1913, and published a few weeks ago, statistics were given of the number of trade vehicles passing over the London bridges and through the tunnels. The increase has been from 56 per cent. in 1911 to 58 per cent. in 1912, and I think we can reasonably take it that that increase of 2 per cent. per annum will be greater as the years go on; there will be no decrease. Mr. W. R. Pryke, at the time he gave evidence before the Royal Commission on London Traffic, was Chairman of the Bridge House Estates Committee of the City Corporation, and he stated that five-ninths of the trade vehicles passing over Southwark Bridge were empty; in other words, four-ninths of them were either partially or fully laden. Is not this a waste of energy? Can it not be obviated? At the suggestion of the President of the Local Government Board, Mr. Edgar Harper, who was formerly Statistical Officer of the London County Council, considered this question and reported that the work of collection and delivery of goods in London from a central goods clearing-house could be accomplished by 5,000 motor lorries only. Sir Herbert Jekyll has said that the London clearing-house scheme is one of those which are prominent among the many suggestions for relieving London traffic. That is a question for experts, and he says he is not aware of any experts in the handling of goods who have pronounced in its favour. The list of eminent engineers, electrical and mechanical, who have done so is too

long to mention here to-night. The machinery for automatically handling and sorting goods has quite passed the experimental stage, and is in full working order now at Battersea, working in the flesh—not models, but machinery of full size. I agree that the question of housing is inseparable from that of transport, either for human beings or for goods. The area occupied by railway goods-yards in London is little less than that of the whole of the London parks, and it has been calculated that the capital value of the goods-yards is at the present time about £70,000,000. These vast areas of land could be well and profitably employed for the much-needed housing schemes. As I have made two designs for the proposed buildings, as architect to the New Transport Company, in conjunction with the engineers, I believe that the Central Goods Clearing House would have a very great effect in reducing the number of goods-vans in the London streets. One of the Managing Directors of one of the biggest carting contractors in London has stated that if the clearing house were built the scrap-heap composed of the vans for delivering goods in London would be as high as St. Paul's Cathedral. I think most of us would be glad if Sir Herbert Jekyll would give us a rough idea of what would be the cost of the acquisition of the property and the streets proposed, and approximately what number of years it would take for the work to be executed in accordance with the map he has been so good as to show us.

MR. W. R. DAVIDGE [A.]: May I associate myself with the words of appreciation which fell from Mr. Raymond Unwin as to the valuable work which has been done by the London Traffic Branch of the Board of Trade? For the first time in the history of London we have got a Government Department actually taking an interest in the affairs of London as a whole. That is a valuable precedent for the future, and I think we, as an Institute, should wish Sir Herbert Jekyll and Colonel Hellard every success in the great labour which they have undertaken. With regard to the Paper, every one here who has gone into the question of London traffic must agree almost word for word with every sentence which Sir Herbert Jekyll uttered. There are one or two points, however, on which I am inclined to join issue with him. The first one which struck me as being not in accordance with my reading of the Census returns is the statement that London has been made by the railways. There is no doubt that in the early part of the century London was increasing slowly; but if you take the percentage increase for every ten years you will find London has been going steadily on, and that it did so long before railways came. And even if railways had not come, London would still have been a great city. I do not know whether it would have been as big as it is now, but that is beside the point. Railways have succeeded in unmaking London. London without railways would

have been a city; London with the railways is a conglomeration of communities. The railways have succeeded in spreading London, and that spreading has had a very valuable effect, as has been well pointed out, in giving people opportunities of getting out into the country. But the condition of things now is different from what it was when the railways came. Eighty years ago, when improvements for London were first talked about, people were talking much the same as people are doing now. They were all agreed that a plan was needed for London extension. And on the second page of Sir Herbert Jekyll's Paper you will find the remark, "It is significant that at this time the efforts of the Legislature were directed to bringing the whole of the main roads in what is now known as Greater London under the control of a single body." Before the railways came there was a body known as the Commissioners of Metropolitan Roads, with very wide powers. These were on the point of being extended, and we should have had a vastly better system of main roads than at present we possess. In the next sentence we are told, "This desirable measure was on the point of being carried into effect when the whole aspect of the question was altered by the introduction of railways." The whole of that idea was knocked on the head. Without railways we should have had some other method of transport; we might have had motor traffic fifty years ago; everything which motors are made of existed fifty years ago, though perhaps everything had not been discovered. Discovery was turned on to another track by the introduction of railways. What we have to bear in mind is that when railways came in, people were experimenting with road vehicles. There was a steam 'bus even then running regularly between London and Birmingham. The necessity for a general plan is obvious to all of us. Take the Tube railways. They have been constructed in the last ten, or say, fourteen years, and they are made of different sizes, so that the Great Northern and City, when it wants to connect on to the South London, finds that it has to alter the whole of the tube; it has to be made bigger, and that involves considerable engineering difficulties. That is only one instance of the necessity for a general plan to deal with both roads and railways. On the next page is the crucial point of the Paper, namely, that the volume of traffic is increasing more rapidly every year. If there is a danger signal anywhere in this Paper, it is that. Every year the difficulties are getting greater, and every year the traffic is increasing in volume; not in a regular percentage but in an increasingly greater ratio; and unless something is done soon we shall not be able to talk about town-planning London unless we start the other side of Windsor. I do not think I am exaggerating when I say that unless something is done very soon it will be too late. The suggestion which has been made that each of these different competing kinds of traffic should learn to

find its own place is a valuable one. Another suggestion of value is that railways should be used to deposit passengers at long distances. The great railways should run non-stop through trains for at least ten miles without a stop, and that would be a good thing for London. We do not want so many stations, certainly not for rapid traffic. The use of light railways has much to commend it, and the use of light railways and tramways jointly needs careful consideration. Most of you know the tramway or light railway which runs between Cologne and Bonn, and there are a number of others in Germany. In the open country this light railway travels at 30 or 40 miles an hour, with practically no stops at less intervals than 5 or 10 miles. When it gets into a city, it becomes a tramway, and stops at more frequent intervals. It seems to me that some such system, a combination of rapid travel in the outskirts with slow travel in the centres, is necessary here, and that may be a solution in the direction of the valuable object-lesson which has been suggested by the Southend Railway. That example shows what can be done by a railway alive to possibilities, and if every company followed the example of the Southend Company, and took their passengers to great distances, it would be the best thing for the Metropolis. There is no need to continue building on the outer fringe of London. Let us go further afield, and start a new nucleus, and build out there. You could take any existing country town and use that as a nucleus if necessary; but there is no reason why you should go tacking on to the outskirts, either at Golder's Green or Ealing, when we might start 20 or 30 miles out. It is solely a question of time. We must secure these open belts of country while yet there is time; we must not let London grow in spite of ourselves. Another word I would like to say concerns the very valuable suggestion which has been made, that fast road traffic will have to approximate more nearly to railway traffic. We must reckon on getting through facilities; we shall have to have roads entirely for fast traffic if necessary, with no cross-roads running into them; or we must introduce tunnels in order to deal with the problem. I am glad to be able to add my extreme appreciation of the vast labours of the London Traffic Branch, and to congratulate that Branch on the additional powers which have been promised them in the near future; and we may, as an Institute, have every confidence in the far-seeing manner in which these powers will be used.

Mr. FRANCIS HOOPER [F.]: In thanking the Lecturer and Colonel Hellard for what they have brought before us, I feel strongly that this is a matter in which the public needs stimulating. Sir Herbert Jekyll and his Board have been endeavouring to instruct representatives of district authorities round London, but I respectfully urge that we want something more, and suggest that the plan which has been prepared by Colonel

Hellard should be reproduced on a clear and large scale, and that a copy should be hung in the Council-room of every local authority round London. We are unfortunate this evening in the absence of one deeply versed in this subject. Sir Aston Webb has visions of London a century ahead. Is it not possible to interest railway engineers, architects, and surveyors in this scheme, a fund being raised for the purpose by the local authorities concerned, in proportion to their rateable value, to offer and pay premiums for the most effective schemes produced by a certain date, and to divide London into such sections that it would be possible to work at in detail and to aid Colonel Hellard's proposal? There are buildings and open spaces to be preserved, railway stations and varied trains to be considered before the arterial roads are determined, all requiring an enormous amount of thought and co-operation on the part of every authority on the route.

THE PRESIDENT: We are extremely fortunate to-night in having to address us on this intricate problem two of the leading experts of the country. We have listened to a most careful, thoughtful, and, I may say, most masterly Paper from Sir Herbert Jekyll, and Colonel Hellard has given us that extraordinarily interesting map for which he is responsible. We have had, too, some very interesting speeches from various of our members. I myself do not profess to know anything about this subject—I have to admit it with shame—but I listened to our members when they threw a profusion of valuable figures at our heads, and I am surprised at their erudition. I do not propose to detain you with many remarks of my own, but there are one or two things that Sir Herbert said which I think are, quite apart from this immensely important subject, of interest to us as citizens, and also as men who have to deal with the laying out of building estates. Among the points of special interest was this great change or habit to which he called attention, and which is due to the change in modes of locomotion—viz. the centrifugal tendency, the tendency to get further and further afield. He pointed out, with kindly thought for us, that this may mean and need a further sphere for building operations. People do not care about distance so much; it is a question of time. If you can be hurled along at fifty miles an hour to places where there are large areas to be built upon, enterprising architects will go, and I have no doubt will develop a fresh type of house, because these occupiers of houses will not be wholly countrymen; their work will lie in London, and they will be half-and-half. So we may get a fresh type of house, and that is one sphere of our activities, apart from the main question. Then there was another point touched upon by Sir Herbert which interested me very much, and I was very glad to hear Mr. Raymond Unwin comment upon it. That is the width of the roads,

Sir Herbert said they should be, if possible, at least a hundred feet wide. It would be a great thing to get as much as that; but even that, as Mr. Unwin said, is not wide enough for all the purposes which are wanted, and it occurs to me that in my wanderings among the provincial towns of France I have seen many an old town of comparatively minor importance which has its main access considerably over a hundred feet wide, often planted with a double avenue of trees, which shows by the way how far we have dropped behind in civilisation, in that we have now, two hundred years afterwards, to try and recapture some of the achievements of the civilisation of the eighteenth century. There was another point which Sir Herbert mentioned, for which all architects should be grateful to him: he pointed out that bridge-building was really the affair of the architect, in co-operation with the engineer, and that it was not for the engineer to design the bridge and call in the architect to act with him. He speaks as an expert engineer himself, and this recognition from him is very welcome to all of us. Sir Herbert touched on many points of vital interest, but the main theme which they all lead up to was that there ought to be some Central Authority to prevent a recurrence of the innumerable and most costly mistakes made by our predecessors. I think all sensible opinion has come to that conclusion. Mr. Hooper referred to some admirable remarks in a discourse of Sir Aston Webb's lately. I have before me a letter from Sir Aston, which I will read to you. He says:

"I have read Sir Herbert Jekyll's Paper with great interest, and am very much disappointed that, owing to a chill, I am unable to attend this evening. The question of the laying out of the arterial roads for London is one of vital moment to all interested in London town-planning, and I venture to agree with every word Sir Herbert Jekyll has said. Had I been present, I should have asked the Meeting to pass some such Resolution as the following, using Sir Herbert's own words:

"That what is urgently required is a Central Authority, with power first to lay down the lines of arterial roads, and, secondly, to require local authorities to make their schemes conform to prescribed lines which happen to traverse their areas"—the Resolution to be forwarded to the authorities concerned."

I think that is a proposal we might well act on. I myself should like to see Sir Herbert Jekyll and Colonel Hellard invested with the powers of the Prefect of the Seine, though I do not think we can put that forward from this Institute. But I think you will agree to such a Resolution as this, and that it be forwarded to the authorities concerned. I will now put the vote of thanks, and afterwards ask you whether you approve of this Resolution.

The vote of thanks was carried by acclamation, and the Resolution as above, moved by Mr. Raymond Unwin and seconded by Mr. George Hubbard, F.S.A., having been put from the Chair, Mr. Maurice B. Adams asked if it could not be modified to include railways, and referred to the proposed scheme for extending the Great Northern Railway through Ealing and round about the suburbs in the North of London, by which vast areas of playgrounds and recreation grounds would be practically destroyed. When railway companies proposed schemes of this sort there should be a Central Authority to determine beforehand the lines on which such schemes should be carried out. He thought it imperative that the Resolution should include a reference to railways.

THE PRESIDENT said he was quite in sympathy with Mr. Adams on this point, but it raised a wider issue which should be dealt with separately. It would be wiser, he thought, to stick to the terms of the Resolution.

The Resolution was then put and carried unanimously.

SIR HERBERT JEKYLL, in reply, said: I would first thank you, Mr. President, and the gentlemen present for the very kind way in which they have listened to my remarks, and for the vote of thanks which they have been pleased to give me. It is a great pleasure to me to come here and address you on this subject. It is now so late that I can do no more than touch lightly on some of the points which have been raised in the discussion. Mr. Raymond Unwin referred to the possibility of goods traffic being carried on underground. That, no doubt, would be a most desirable measure, and the action of the Post Office in constructing an underground railway for the conveyance of their mails may lead to something of that sort in the future. It is purely a commercial question whether it is likely to pay. He referred to New York. Manhattan Island, which is the centre of New York, is a very restricted area. It is a long, narrow island, and it is necessarily congested because there is no room for expansion, though it is becoming possible to spread out now, owing to the railways which are being constructed. I was told as a fact—which I do not vouch for—that there is not room in the streets of New York for all the inhabitants of New York to stand at the same time! Then there is the question of pedestrian traffic and accidents. That is a question which has loomed very large of late, and, of course, it is a very serious one. It is often supposed, and, I think, unjustly, that the vehicles which cause the accidents take a malignant pleasure in killing and injuring as many people as they can. That is not the case. There are none to whom it is of so great importance to avoid accidents as the people who cause them. A large proportion of the accidents which happen are due to the want of the most ordinary care and caution on the part of the unfortunate people themselves. There is only one way, as far as I

know, of preventing accidents in the streets of London, and that is by prohibiting all wheeled traffic of every description! When you consider the enormous volume of traffic of all kinds, it is not surprising that accidents should happen. They are deplorable, and the number by itself sounds formidable, but when taken in relation to the number of people moving about, and the number of vehicles, the proportion is not large. Then there is the question of refuges. Of course, refuges are of the utmost importance, and they should be, in some streets, added to considerably in number; but centre lamp-posts are different. There must be refuges at the principal crossings, but it is not desirable to have things which though not intended to be refuges are used as such, along the whole length of the street, so that they tempt people to cross at many different points when crossing should be restricted to well-defined points where their safety can be properly looked after. Those lamp-posts and the spaces which surround them are more likely to cause accidents than to prevent them. The question of a clearing-house is a very large one. I was asked what would be the cost of the measures which are now proposed for the improvement of the roads, and how long those measures will take. My answer to that is, I do not know. A clearing-house sounds an admirable thing; I am not against it, but it is for expert people like the goods managers of our railways to say whether it will work or not. The real test of the feasibility of this scheme will be when it comes to be discussed in the Committee-rooms of the Houses of Parliament. There is one point which has not, so far as I know, been mentioned in connection with this proposal of a central clearing-house, which will entail the employment of a very large number of people. We are all familiar with the Labour disputes of the day, and it is possible, if all the goods traffic of London were concentrated under one roof, that you might easily have a movement of that kind which might paralyse the whole traffic of the city. There may not be much in it, but it is a point which is deserving of consideration.

MR. W. E. RILEY [F.], Architect of the London County Council, writing since the Meeting, says:—

There is probably no question at present before the inhabitants of this great city which is so urgent as the problem of our traffic, and, remembering what ceaseless effort is required before anything is done, we should all be grateful to Sir Herbert JeKYLL for bringing the subject again to public notice. The inconvenience and peril of the existing state of affairs is constantly present to the man in the street, and yet it is remarkable with what apathy these very real dangers come to be regarded, and how difficult it is to stir up some definite action. Royal Commissions have an unenviable reputation for inducing a state of lethargy, but no one can have studied the Report of the Royal Commission

on London Traffic in 1905 without a feeling of despair that so much labour and thoughtful consideration should be treated with such indifference. The Traffic Branch of the Board of Trade has continued the good work begun by the Royal Commission, but it must be frankly confessed that until the man in the street bestirs himself, there seems to be little likelihood of much being done.

We shall also probably agree that, as the Royal Commission laid down and Sir Herbert emphasises, the narrowness of our streets is at the root of the problem, and my official experience during the last fifteen years has quite convinced me as to this. It is an even more important factor than the want of a definite plan, and a great deal is undoubtedly due to the inadequacy of our building laws. The minimum width of streets in London was fixed at 40 feet by a By-law made in 1857, and it remains the same to-day, more than half a century later. This applies only to the County of London, and it is a further illustration of the unsatisfactory state of affairs when we find that adjoining the County there are districts, each having its own By-laws, in which the minimum is in some cases 36 feet, in others 40 feet, in others 45 feet, and in some 50 feet. The maximum width which can be required under the London Building Act for a new street is 60 feet, compensation being payable in certain cases, but it may be considered that even this width does not in the circumstances meet modern requirements. It would only come within the classification of a third-class street as defined by the Royal Commission, and as a concrete example the case of Shaftesbury Avenue may be quoted. This street, which was completed in 1886, is 60 feet wide, and the width of the carriage-way near its junction with Piccadilly Circus is about 36 feet. The width of a motor-bus over-all is about 7 feet, so that provision is only made for practically four lines of traffic, excluding any allowance for standing vehicles, street refuges, and other unavoidable obstructions.

The disadvantages under which the Capital City of the Empire suffers are the more apparent when one remembers that smaller provincial towns enjoy so much more favourable conditions. In Barrow-in-Furness, for example, the Corporation in 1875 obtained an Act empowering them to require a width of 80 feet in main outlets, and considerable lengths of streets have been constructed of this width. Liverpool obtained Parliamentary authority in the same direction in 1908, and various local authorities throughout the country have similar powers. Abroad we find even more comprehensive powers in operation, and we are forced to ask, why should London have such unenviable distinction? The County Council in 1905 certainly endeavoured to obtain power to define in important thoroughfares a building-line not more than 75 feet from the centre of the street, provision being made for compensation; but the

immediate result was the presentation of sixty-four petitions against the Bill, including one from the Royal Institute of British Architects. Perhaps, after this meeting, the Institute might be more favourably inclined to such proposals.

Sir Herbert has drawn attention to the necessity for locating the principal outlets, in order to prevent the creation of obstructions to future widening to meet traffic requirements. This was one of the most important recommendations of the Royal Commission, but, like most of the others, it has as yet been treated as non-existent. The case of Euston Road may be quoted as an example. An Act of 1756 prohibited the erection of buildings within 50 feet of the highway on each side of the New Road, re-named in 1857 as Marylebone, Euston, and Pentonville Roads. These streets are thus bordered for considerable lengths by forecourts. In many other places, however, buildings of varying heights were allowed to be, or were erected in advance of the general line of buildings, with the result that the width of what was intended to be a highly important thoroughfare has been much curtailed, and the opportunity to create a fine boulevard through the North of London greatly impeded. Attempts have recently been made to re-establish the general line of buildings in these thoroughfares, with some success, but only after prolonged and costly litigation; but if sufficient attention had been given to the intention of the Act of 1756, a much-needed improvement could now be carried out at comparatively small cost to the public. The creation of obstructions to widening in these streets applies equally to other main roads in London, and as it can only be assumed that the growth of the city and its traffic will continue, it behoves us to exercise more foresight than is exhibited in some of the unfortunate examples which surround us.

Books Received.

- Windsor Castle: An Architectural History. Collected and written by command of their Majesties Queen Victoria, King Edward VII., and King George V. By W. H. St. John Hope, Litt.D., D.C.L. With reproductions in colour of drawings by Paul Sandby; colotype reproductions of drawings, engravings, and photographs, and woodcuts by Orlando Jewitt. 2 vols., with portfolio of plans in 14 colours. Imp. 4o. Lond. 1914. Price Six, Eight, and Ten Guineas net, according to binding. [*Country Life*, 20 Tavistock Street, Covent Garden.]
- Houses and Gardens. By E. L. Lutyens. Described and Criticised by Lawrence Weaver. With 300 Illustrations 100 plans, and 16 pages of Detail Drawings. Fc. Lond. 1913. Price 25s. net. [*Country Life*, 20 Tavistock Street, Covent Garden.]
- The Garden City Movement up to Date. By Ewart G. Calpin, Secretary to the Garden Cities and Town Planning Association. 4o. Lond. 1913. Price 1s. net. [Garden Cities Association, 8 Gray's Inn Place, W.C.]
- Spon's Architects' and Builders' Pocket Price Book, 1914. Edited by Clyde Young [F.] and Stanford M. Brooks [*Licentiate*]. Forty-first Edition. Price 2s. 6d. net.; by post 2s. 8d. [E. & F. N. Spon, Limited, 57 Haymarket.]

REVIEWS.

SANITATION.

Drainage and Sanitation: a Practical Exposition of the Conditions vital to Healthy Buildings, their Surroundings and Construction, their Ventilation, Heating, Lighting, Water and Waste Services. For the use of Architects, Surveyors, Engineers, &c. By E. H. Blake. With 379 illustrations, specially drawn by the Author. 8s. Lond. 1913. 10s. net. [B. T. Batsford, 94 High Holborn, W.C.]

It would be hard to conceive of an adequate treatise on "Sanitation" which did not include "Drainage," and this book is most inclusive. Whatever faults one might find with it they are not sins of omission; in fact, it is a perfect mine of information. And that is the point—mining suggests excavation and screening. Life is too short for sifting our information; we want the real thing on the surface—the unalloyed material in a handy form. The preface states that, "Intended primarily as an introduction to the subject, it is hoped that the following pages" [over 500 by the way] "may prove of interest to both the novice and the experienced practitioner." The "novice," with only the bare chance of attaining the proverbial three-score-and-ten, would probably take fright at the prospect of his extensive curriculum being in proportion with this "introduction" to merely one of the subjects, and contemplate some other career before the expiration of the allotted span. The "experienced practitioner," on the other hand, however his interest might be stirred, would find his practice materially interfere with the perusal of the pages of so extended a work. But in the reference library the volume would be of immense value, all the more enhanced by the very complete index provided. But even regarding the book from this standpoint, one would suggest that a freer use of the blue pencil would have had a beneficial effect. It is hardly necessary to explain what rain is, or wherein it differs from fog, in order that one may know how to construct a waterproof roof. The author admits that "the origin of fire is about as uncertain as the date of the discovery of coal as a fuel." This is fortunate, or the history of fire and coal would have materially increased the proportions of the chapter on Warming and Lighting. As it is, the historical remarks date from pre-Roman times, which is more than sufficient for one who may be desirous of discovering the principle of the Manchester stove.

The volume is dedicated "to the President and Council of the Surveyors' Institution, which, by the medium of its examinations, has rendered a knowledge of this subject more general." Incidentally, it might be observed that other institutions have done something in that way, including the Royal Sanitary Institute.

Taking the natural order of things, the author deals first with the selection of a site. A position

on a hill-top is not desirable unless protected by a belt of trees. The hillside is not altogether favoured. This is understandable when, reading later, one meets with the elaborate and expensive methods which may be necessary to avoid dampness. Low-lying districts are also to be avoided if possible. The impression left is that of a somewhat limited selection. These are admittedly "counsels of perfection," which may be wise in many ways but are liable to leave the student with a distorted judgment when he comes to deal with practical everyday questions. For the same reason, for a lead flat to fall three inches in ten feet would probably lead to an unnecessary expense in furring, 7 or 8 lbs. lead for flats and gutters would, in most instances, be rather above the average unless considerable traffic is anticipated; whilst in conjunction with parapet gutters the damp-proof course advocated to be laid "just below roof," appears to be a needless luxury probably never required where snow grids are used, and, if required, would not be very effectual. On the other hand, some points can scarcely be said to be ideal—the suggested use of the slate damp-proof course, and the advocacy of stoneware bonding bricks for cavity walls. One would not expect a textbook on Sanitation to tolerate the discharge of the subsoil drainage into the foul drain, with the possibility of the trap becoming unsealed by evaporation in times of drought. No word is given in discouragement of the use of wallpapers, though in the case of renewal it is stated that "the old paper should be entirely removed from the walls, as it will have absorbed dirt and possibly not be free from germs, while behind it will be decomposed paste in most cases."

Generally speaking, the treatment of the subject of construction in its relation to the exclusion of damp is clear and sufficiently elementary for the requirements of the student.

The chapter on Ventilation supplies some very useful information described in a lucid and concise form, and containing descriptions of various inlet and extract appliances in relation to natural ventilation. The Plenum system is also dealt with at some length; but as this section of the work bears a filial resemblance to a treatise of which the present reviewer is the author, he does not feel justified in making further comment on the subject.

Probably the chapter which is most consistent with the aims of the book is that which treats of Warming and Lighting. With the exception of a page or two of the history and methods of days gone beyond recall, this section is packed with information that cannot fail to be of use to the student. The author deals with the popular prejudice against the closed stove (and one might add steam and hot-water systems)—"people want to see the fire." The prejudice, nevertheless, is a very real one, and has to be met often at the expense of personal comfort and even of health.

In the case of gas fires, it is stated that the inferior types of apparatus "give off the products of imperfect combustion, appear to dry the air, and cause a feeling of oppression." It would have been interesting had the type of gas fire been indicated which is not subject to these defects.

The description of the high- and low-pressure hot-water and steam systems of warming is clear and to the point, and well illustrated. Succeeding a few remarks on fenestral lighting, this useful chapter concludes with a short description of artificial means of lighting; the candle, oil lamp, ordinary gas burners, incandescent gas burners, and electricity are each dealt with, and it is interesting to note that if a room were lighted with exactly the same *quantity* of light by each of these methods, the comparative vitiation of the air would be 1, .7, .45, .27, and 0 respectively. Thus science and experience has worked much in the health of our homes by the abolition of the "candle" (the earliest, and at one time the only illuminant) for the popular and healthful "electricity."

Two chapters (extending over ninety pages) are devoted to Water Supply, describing the properties and qualities of water, the sources of supply and storage (including the calculation of pressures in reservoirs), the methods of purification, systems of supply, service pipes of various kinds, valves, cocks, taps and cisterns, cylinders, tanks, boilers, and the usual hot-water circulating systems, and extending to several types of pumps, and the uses and construction of hydraulic rams. Indeed, these two chapters alone contain sufficient material for a treatise on the subject with which they deal; but, regarded as a section of an introductory book, these ninety pages are too exhaustive (and too exhausting) for the purposes of the general student.

As is to be expected in a treatise on Sanitation, a very large proportion of the book is devoted to sewage disposal and drainage. In a sense, this may be regarded as the most important of the various subjects falling within the title. In many respects, after due allowance for what may be regarded as matters of opinion, these pages are somewhat disappointing. The question of trough closets is dealt with and dismissed in a few lines. One would have expected, in a book dealing with modern sanitation, that these filthy contrivances would have been strongly condemned. No automatic flush discharging at stated intervals, however frequent, can prevent an accumulation of foul matter in the trough, whether divided into separate compartments or not. Sanitary authorities have for some time condemned the whole principle, and separate pans with water-waste preventing cisterns are now used in modern schools, factories, &c. The rain-water shoe, shown in fig. 219, is not of good design, the bend from the socket end should be easier; otherwise the tendency is for the force of water to splash back and force the grating or cover. The author does not appear to have chosen the best and most up-to-date sanitary

fitting for the purpose of illustration. Many manufacturers have spent a considerable time in perfecting the earlier forms of gullies, shoes, clearing arms, inspection doors, &c., the result being that much more efficient fittings are now at the disposal of the architect and engineer. Access hole stoppers, as shown in fig. 226, are not very efficient; if fixed with red lead they are apt to blow out, and if cemented in, are useless. A better way is to carry the end of the drain to the surface with an easy bend and fix over same at ground level a galvanised iron air-tight locking cover and frame, which can be fixed in the socket, several varieties of which are to be obtained, the gully or other fitting being connected to the drain with a Y junction fixed below the bend. In figs. 255 and 257, bends in manholes, entering above the invert of channels, should not be used for carrying soil, which should discharge on a level with the main channels. It is a pleasure to note that the author does not agree with the proposal brought forward by many of the local authorities that the house drainage should not be disconnected from the sewer. To have the sewer air brought to the drain side of every trap used in connection with the drainage of a house is to bring the danger much closer and to many points (instead of cutting off at the one point furthest from the house), the failure of any one of which would cause an escape of sewer air into the premises. The local authorities are no doubt influenced by their wish to obtain a cheap method of overcoming the difficulty of obtaining ventilation to their sewers.

Figs. 277 and 278, showing two methods of house drainage, are not very happy. In fig. 277 the vent pipe should have been taken off the head of the soil drain; the rain-water pipe in the forecourt is shown taken direct into the intercepting chamber without any gully at the foot of the pipe; the same remarks apply to fig. 278, only here the offence is further aggravated by the fact that two rain-water pipes are shown connected direct to the chamber, the cast-iron soil drain carried under the house is not ventilated; very little extra expense would have been entailed if the drain from the inside w.c. had been taken outside and connected to a small additional manhole at the end of the back addition. In fig. 279, No. 4 rain-water pipes are shown connected direct to the soil drain; and in fig. 280 the whole of the rain-water service is shown in a similar manner, and the long length on the roadside is unprovided with a proper vent pipe. These illustrations should have been overhauled and made *sanitary* before being placed before the public. In fig. 282, manholes No. 2 and 7 would have been better if placed in the same line as the drains to manholes No. 3 and 4 respectively. This arrangement enables a man to work the rods through in case of stoppage; as shown on the plan the space available is too cramped.

The author has devoted two chapters to sewage and sewage disposal. The descriptions given of the

various methods adopted, though brief and to the point, are sufficient to give the student a good idea of the different processes. Equally praiseworthy in this respect is the chapter in which the composition, properties, and manufacture of the principal materials used in sanitary works are described, supplying as it does in a concise form ample information sufficient to enable those engaged in the supervision of such works to distinguish the proper from the inferior manufactures, whilst the suggested headings for a specification of sanitary works will be found very useful. The author's remarks on sanitary surveys and reports form a valuable addition not generally met with in books on sanitation.

The last chapter, XV., dealing with legal notes, is both comprehensive and of use to the professional man, but the loose manner in which the various by-laws have been drawn up, and the many and varied interpolations of them which have been made by the different local authorities, render it impossible to give any definite decision as to what may or may not be done. Details of sanitation which may be compulsory in one district are often condemned in the adjoining. Many authorities take a narrow-minded view and compel the builder to carry out the exact letter of the by-law where, in many instances, better and more efficient sanitation can be obtained by a different method. The author's clear explanations and cases quoted should enable the reader to avoid many pitfalls.

The work may be regarded as a really valuable addition to technical literature, and may be confidently recommended as containing a store of valuable information—and some that is not so valuable. Few architects or sanitary engineers have a practice so diversified as to include carpet-beating, or a practice so wide that the branch office among Greenland's Icy Mountains requires information as to the accepted local substitutes for window glazing. But this is by the way; to some these little digressions may be interesting, but to all requiring a reference book on Sanitation the work, as a whole, should prove useful.

HAROLD GRIFFITHS [A.].

ORNAMENT.

The Evolution of Architectural Ornament. By G. A. T. Middleton [A.]. La. 8o. Lond. 1913. [Francis Griffiths, 31 Maiden Lane, Strand, W.C.]

Mr. Middleton has added a great deal to the debt owed to him by all whose daily work is in the realm of design by the production of this volume. It is not to be confounded with the number of text-books of ornamental design which appear to be intended, some of them at least, as a convenient source of "inspiration" for all such as have neglected to acquire the rudiments of their calling in the proper way, but it is a book bearing in its

text and illustrations the imprint of a student of design who has travelled far and thought much. The author traces the whole range of decorative work back to what he, and all of us, for want of greater knowledge, must presume to be original forms. The familiar anthemion is followed up through all its well-known disguises to others we may not so easily recognise, and by the stretching of a tendril or the unfolding of a leaf we are led over some unexpected bridge to find on the further side all the light carvings of the Renaissance brought as it were into line as the legitimate offspring of the old, old friendly acanthus we all in our student days drew in pencil and ink, and then shaded beautifully in sepia—to satisfy the dread examiners of the Institute. And so he finds it to be with all foliage design; all that we call Classic, or Gothic, or Renaissance is shown by well-found arguments to be derived from such simple basic principles as a leaf or some animal form.

The author draws attention to the singular circumstance that in Gothic design the types of foliage employed followed, in a degree, the rotation of the seasons, but argues with reason that it must have been purely accidental. This is a view with which the present writer entirely agrees, but it should not be difficult to show that such a development was the inevitable consequence of the changes in style. In the illustration from Henry VII.'s Chapel at Westminster, for instance, it would be extremely difficult to design any form of foliated ornament which would be suitable to the attenuated character of the many-buttressed pinnacles, and it might be argued that anything requiring more detail than mere twigs and tendrils would have confused the general perpendicularity of the work and introduced a discordant note.

The book contains a wealth of illustrations, most of them either photographs taken by the author or sketches from his pleasantly sympathetic pencil, and concludes with an interesting chapter on some Classic remains at Alexandria. In conclusion, there is one point on which Mr. Middleton may find consolation, for the glorious bronze gates made by Sansovino for the loggia of the Campanile at Venice are still to all appearances intact, and now adorn the new tower recently completed. How much "restoration" they have had to undergo is, perhaps, the secret of the Italian authorities.

ROBERT W. CARDEN [A.].

COTTAGES.

The "Country Life" Book of Cottages. By Lawrence Weaver. 8o. Lond. 1913. Price 5s. ["Country Life" Office, 20 Tavistock Street, Covent Garden; and G. Newnes, Ltd., 8-11 Southampton Street, Strand.]

The little volume with which Mr. Lawrence Weaver has followed up his previous books will be found most helpful to designers and builders of cottages, the successful accomplishment of which is a somewhat complex problem.

The absurdly stringent by-laws prevalent in many country districts, the vital question of cost and the very small scale of the work, all help to increase the complexity of the problem, and the author's book will be welcomed by all interested in the matter.

Mr. Weaver divides his work up into a series of chapters all excellently and concisely written; of these the introductory chapter is by no means the least important, dealing as it does with the initial obstacles in the designer's path. It is to be desired that clients may read this chapter carefully, and note that the author states therein that the cost to-day of the cottages illustrated in the succeeding portions of the book is at least 25 per cent. greater than the amount stated.

The following chapters cover a much wider field than the title of the book suggests, describing as they do buildings so widely differing in character as the labourer's cottage, the cottages and small houses at Gidea Park, Essex, those at Hampstead Garden City, and the competition designs for the "Country Life £600 Cottage." Strictly speaking, much of the work above named is of the small house and not the cottage type, and their occupants would probably be aggrieved if described as otherwise than householders. Generally, however, the illustrations of actual buildings are aptly selected and the plans interesting.

We must, however, take exception to the so-called £150 cottage, illustrated upon pp. 16 and 17. In the first place this design is for a pair of cottages and the cost is put at £300; the planning leaves much to be desired, and the long gutter between the pitch roofs is bad constructionally. It is fortunate that the much abused by-laws will prevent the building of this type of cottage in many districts. Again, the back-to-back cottage flats, figured on pages 33 and 34, are surely a retrograde move, and whether erected in urban or rural surroundings would be cheerless and stuffy; the present craze for cheapness has doubtless evolved both of these examples.

The author's remarks upon planning are suggestive; the question of providing a parlour as well as kitchen in the labourer's cottage is discussed. Our own experience is that parlours are but little used, and it is better to give the labourer a large kitchen living-room, and to fit up a small range in the scullery for summer use.

A very interesting chapter is the one upon repairs and alterations to existing cottages, containing much valuable information and suggestive procedure in such work. The illustrations show that the various designers have intimate knowledge of and sympathy with old work, and it is only by these means that the present-day designer can hope to produce satisfactory work; indeed, one may safely say that the good cottages illustrated in Mr. Weaver's book are the outcome of such study.

W. G. HORSEMAN, *Licentiate*.



9 CONDUIT STREET, LONDON, W., 31st January 1914.

CHRONICLE.

R.I.B.A. PRIZES AND STUDENTSHIPS 1914.

The Council's Award.

The Designs and Drawings submitted for the Institute Prizes and Studentships are now on exhibition in the R.I.B.A. Galleries (9 Conduit Street, W.). The Council's Deed of Award, read at the General Meeting of the 26th January, gives the results as follows:—

THE ROYAL INSTITUTE SILVER MEDALS.

(i.) *The Essay Medal and Twenty-five Guineas.*

Six Essays on various subjects selected by the competitors themselves were received for the Silver Medal under the mottoes and titles as follow:—

1. "Daedalus": Minoan Architecture: A Study of Pre-Hellenic Art in Crete.
2. "Filogenovesato": The Architecture of Genoa.
3. "Oslytel": A Monograph upon Southwell Minster, Nottinghamshire.
4. "Per Ardua ad Astra": The Influence on Architecture of the Condition of the Worker.
5. "Resurgam": The Rebuilding and the Workmen of St. Paul's Cathedral, from the "Accounts."
6. "Stet Fortuna Domus": An Historical Account of the principal London Buildings erected by the firm of Grissell and Peto between the years 1830 and 1846.

The Council award the Medal and Twenty-five Guineas to the author of the Essay on "The Influence on Architecture of the Condition of the Worker" submitted under the motto "Per Ardua ad Astra" *; a Certificate of Hon. Mention and Five Guineas to the author of the Essay "The Rebuilding and the Workmen of St. Paul's Cathedral, from the 'Accounts'" submitted under the motto "Resurgam" †; and Certificates of Hon. Mention to the authors of the Essays "The Architecture of Genoa" under the motto "Filogenovesato," ‡ and "Minoan Architecture" under the motto "Daedalus." §

* "Per Ardua ad Astra": Thomas Simons Attlee, M.A. Oxon. [A.].

† "Resurgam": James Mitchell Halley, *Licentiate*.

‡ "Filogenovesato": Martin Shaw Briggs [A.].

§ "Daedalus": Alexander Robert Chas. Eaton.

(ii.) *The Measured Drawings Medal and £10. 10s.*

Six sets of drawings were sent in of the various buildings indicated, and under mottoes as follow:—

1. "Amussim": 6 strainers (Château de Maisons-Laffitte, 1642-1650).
2. "Dauber": 6 strainers (Vigna di Papa Giulia, near Rome).
3. "Pax": 6 strainers (Fountains Abbey, Yorkshire).
4. "Rags": 5 strainers (San Pietro, Montorio, Rome).
5. "Strike": 4 strainers (The Customs House, Dublin).
6. "The Royal": 5 strainers (Royal West of England Fine Arts Academy, Bristol).

The Council award the Medal and Ten Guineas to the author of the drawings of San Pietro, Montorio, Rome, submitted under the motto "Rags."*

THE TRAVELLING STUDENTSHIPS.

(i.) *The Soane Medallion and £100.*

Eight Designs for an Official Country Residence for a Royal Personage in the United Kingdom were submitted under the following mottoes:—

1. "Akarana": 4 strainers.
2. Anchor (device): 6 strainers.
3. "Cornucopia": 7 strainers.
4. "E X V L": 5 strainers.
5. "Farnesina": 6 strainers.
6. "Halibut": 6 strainers.
7. Thistle (device): 7 strainers.
8. "X X X": 4 strainers.

The Council award the Medallion and £100 (under conditions) to the author of the Design submitted under the device of a "Thistle"†; a Certificate of Hon. Mention and £10. 10s. to the author of the design submitted under the motto "Farnesina"‡; and Certificates of Hon. Mention to the authors of the designs submitted under the mottoes "Akarana"§ and "Anchor"|| respectively.

(ii.) *The Owen-Jones Studentship and £100.*

The Council much regret that no applications were received for this valuable prize.

(iii.) *The Pugin Studentship and £40.*

Five applications were received for the Pugin Studentship from the following:—

1. G. E. Charlewood: 4 strainers.
2. Gordon Hemm: 4 strainers.
3. William H. Hamlyn: 4 strainers.
4. Julian R. Leathart: 4 strainers.
5. W. Cecil Young: 4 strainers.

The Council award the Studentship, Silver Medal, and (subject to the specified conditions) the sum of £40 to Mr. William Cecil Young, and a Certificate of Hon. Mention to Mr. Julian R. Leathart.

(iv.) *The Godwin Medal and £85.*

Two applications were received for the Godwin Bursary from the following:—

1. Martin Shaw Briggs.
2. A. F. Wickenden.

The Council award the Medal and (subject to the specified conditions) the sum of £85 to Mr. Martin Shaw Briggs [A.].

(v.) *The Tite Certificate and £30.*

Eight Designs for the best Imaginative Composition in Perspective in the Italian Style for an Important Fountain were submitted under the following mottoes:—

1. "Cascade": 3 strainers.
2. "Fons": 3 strainers.
3. "Golden Dolphin": 4 strainers.
4. "Joy": 3 strainers.
5. "Merry and Bright": 4 strainers.
6. "Panama": 4 strainers.
7. Red Dragon (device): 4 strainers.
8. "32": 1 strainer.

The Council award the Tite Certificate and (subject to the specified conditions) £30 to the author of the Design submitted under the motto "Golden Dolphin,"* and a Certificate of Hon. Mention and £10. 10s. to the author of the Design submitted under the motto "Panama,"†

THE ARTHUR CATES PRIZE: FORTY GUINEAS.

One application was received for the Arthur Cates Prize, viz. from Mr. John Charles Rogers, who passed the Final Examination last June, and the Council have awarded him the prize.

PRIZE FOR DESIGN AND CONSTRUCTION.

The Grissell Gold Medal and £10. 10s.

Three Designs for a Four-Story Dockside Warehouse were submitted under the following mottoes:—

1. "Composite": 3 strainers.
2. "Percy Vere": 6 strainers.
3. "Syrod": 3 strainers.

The Council award the Medal and £10. 10s. to the author of the Design submitted under the motto "Syrod."‡

THE ASHPITEL PRIZE 1913.

The Council have, on the recommendation of the Board of Architectural Education, awarded the Ashpitol Prize to Mr. Wm. Wallace Friskin [Probationer 1913, Student 1913], who passed the Final Examination last December, he being the candidate who has most highly distinguished himself in the Examinations held during the current year.

* "Rags": James Bennett.
 † "Thistle": Cyril A. Farey.
 ‡ "Farnesina": H. Chalton Bradshaw.
 § "Akarana": Gordon Samuel Keesing.
 || "Anchor": Thomas Chalkley.

* "Golden Dolphin": Trenwith Lovering Wills.
 † "Panama": Arthur Gordon Shoemith.
 ‡ "Syrod": Philip D. Bennett.

THE TRAVELLING STUDENTS' WORK.

Pugin Studentship 1913.—The Council have approved the work of Mr. Wm. Paterson, who was awarded the Studentship in 1913 and travelled in Lincolnshire, Essex, Northamptonshire, Westmorland and Yorkshire.

Tite Prize 1913.—The Council have approved the work of Mr. Cyril A. Farey, who was awarded the Tite Prize in 1913 and travelled in Italy and Sicily.

Godwin Bursary 1911.—The Council have approved the work of Mr. Cecil Claude Brewer [F.], who was awarded the Godwin Bursary in 1911 and travelled in America.

Results of the Housing and Town Planning Act, 1909.

A Memorandum (No. 3) of the Local Government Board relative to the operation of the Housing, Town Planning, &c., Act, 1909, and the earlier housing Acts as amended by that Act has been issued as a White Paper [Cd. 7,206]. This Memorandum brings up to date some of the information furnished in the memoranda of November, 1911 and 1912 [Cd. 5,953 and Cd. 6,494], in which particulars were given of the operation of the Act and of results achieved under it, and which showed that the passing of the Act had produced considerable activity on the part of local authorities in regard to housing and town planning. The present Memorandum shows that the activity has increased materially during the year 1913.

The Memorandum states that the Board are satisfied that considerable progress has been made in most districts in the work of inspection of houses, and in the case of a few districts they have been informed that an inspection of all the houses has been completed. The regulations made by the Board contemplated that areas regarded as most in need of inspection should be dealt with first, and in many districts the result has been to secure the remedying of some of the worst conditions. In a large number of cases in which it does not appear that reasonable progress in regard to the inspection has been made the Board have impressed upon the local authorities the necessity of increased activity in this direction. The powers conferred by Section 15 of the Act of 1909 (notice to landlords to make houses fit for habitation) have been utilised very extensively by a number of local authorities, and there has been a substantial increase in the number of local authorities who have exercised these powers. From 3rd December 1909 to 31st March 1911 notices were issued in respect of 18,927 houses. In the year ended 31st March 1912 notices were issued in respect of 43,781 houses; and in the year ended 31st March 1913 notices were issued in respect of 51,915. In the first period notices were issued by 500 authorities, in the second period by 778 authorities, and in the third period by 865 authorities. In addition to the repairs and improvements effected to dwelling-houses by means of action under this section, local authorities have secured the execution of a large amount of work for the improvement of houses without resorting to formal notices under the Act. Moreover, the number of notices under the Public Health Acts for the removal of nuisances is very large, and the Memorandum claims that very distinct

progress has been made during the past year in the direction of securing that houses shall be fit for habitation.

The action taken by local authorities in the provision of new houses since the passing of the Act of 1909 may be summarised as follows:—Loans to an amount exceeding 1,400,000*l.* have been sanctioned for the erection of 6,355 houses for the working classes. In addition there were, at the close of 1913, schemes under consideration by the Board, providing for the erection of some 1,360 more houses at a cost of some 350,000*l.* Thus the loans sanctioned or under consideration at the end of 1913 exceeded 1,750,000*l.*, and the schemes provide for the erection of more than 7,700 new houses by local authorities.

During the last two years there has been a considerable increase in the activity of local authorities, and the improvement is particularly noticeable in the case of rural districts. In the twenty years following the Housing Act of 1890 loans sanctioned to rural authorities amounted to less than 50,000*l.* The total for the last two years is more than five times that amount, or 255,397*l.*, while the total for 1913 alone considerably exceeds the whole amount sanctioned in previous years since 1890.

The Local Government Board have received and considered a number of complaints under Section 10 of the Act of 1909 as to local authorities not exercising their powers under the Act of 1890. The authorities, when communicated with, have usually shown themselves willing to comply with the Board's requirements, and only in one case was it necessary to make an order of default. Many complaints of an informal character also reach the Board, and they communicate with the local authorities thereon, and in some cases the Board have thought it desirable to undertake independent investigations of the housing conditions with a view to securing that improvements shall be made. The Board have also communicated with a large number of local authorities with a view to securing their attention to their duties and much good has resulted from this action. The increased activity indicated, though due largely to the desire of local authorities to effect improvements, may to a material extent, says the Memorandum, be directly traced to the administrative pressure of the Board.

The Memorandum gives in a brief form all the information in the possession of the Board as to the progress made by local authorities in regard to the preparation of town planning schemes. On 31st December 1913 two schemes submitted by one local authority and dealing with 3,762 acres had been finally approved by the Board. Three schemes affecting 6,503 acres had been prepared by three other local authorities and submitted to the Board for approval, and forty-seven schemes, affecting 70,900 acres, had been authorised by the Board to be prepared or adopted by thirty-seven local authorities. Applications from fourteen local authorities for authority to prepare fourteen schemes, affecting 29,761 acres, were under the consideration of the Board, and in seventeen other cases the Board had information that the preliminary notices had been given by local authorities with a view to applications being made for authority to prepare schemes. In 119 other cases the local authorities were known to the Board to have had the matter under consideration.

It is stated, in conclusion, that the regulations governing the procedure in regard to town planning schemes have been in force some three and a half years, and, in view of the experience gained and representations made in favour of certain amendments, the Board contemplate a revision of the regulations at an early date.

Registration of Architects.

Sir T. G. Jackson, Bart., R.A., asked to give his opinion on this subject, expresses himself as follows in the *British Architect* of the 16th January: "I can only say that I still hold the same opinion as of old, that the real object of the movement is to give the architect a sham respectability by means of a diploma. The protection of the public is a mere excuse to float it into favour. The public cannot be protected against bad architecture by any Act of Parliament whatever, and against bad building there are already safeguards enough—almost too many. What else are Building Acts and By-laws created for? Is it likely that if a body of men were issued to the public duly stamped and hall-marked as architects, By-laws would no more be necessary? The whole movement seems in my humble judgment fictitious: I might almost say dishonest. The cry is that the doctor and the attorney have diplomas, and belong to a closed profession which gives them a monopoly, why may we not have a diploma and a monopoly too, and keep all the plums for ourselves? We are told to think of the dignity of the profession, for which, personally, I do not care a straw. Every man will have the dignity and status which he deserves, and he has no right to any more. The motive underlying the movement is the advantage of the architect, not that of architecture, for which it would do nothing, unless indeed it does infinite harm by excluding genius and preventing men rising from the ranks who might do great things. Let us for Heaven's sake keep that liberty which I believe to be the heart of the position the English school holds, and I think deserves to hold, in European estimation, and which under State regulations and restrictions will assuredly wither and die."

London of the Future: a Vision.

Sir Aston Webb, K.C.V.O., C.B., R.A., in an address entitled "London of the Future" delivered at a dinner of the London Society last week, drew a dream picture of the London of 2014, a London from which smoke and dirt had been banished, and the waters of the Thames were so clean and pellucid that fishing for salmon and trout was carried on from embankments which lined both sides of the river, and there was a salmon weir at London Bridge. The bridge itself was like a street, with fine shops and beautiful houses on either side, and it helped to make Southwark as valuable as the Strand. St. Paul's Cathedral was still standing, and was safe for centuries. A law had been passed that no sewers or tunnels should pass within 150 yards of it. Party no longer entered into municipal politics, and so the south side of the river was embanked and many other things were done which formerly were left undone. Along this south embankment were other splendid buildings and picturesque warehouses arched over the roadway in accordance with a report prepared

by the London Society. He remarked how bright and clean everything looked, and was told that this was because they had done away with the smoke and only used smokeless materials. Southwark had been rebuilt and the roofs of the houses were flat, and here the people sat in the summer evening on their roof gardens, looking over London twinkling in the evening sun. Cannon Street railway bridge and the bridges at Ludgate Hill and Charing Cross had been taken down, and the old glass railway termini also. Instead, two big terminal stations had been built, one for South and one for North London, and they were connected by a tunnel. In a bird's-eye view he obtained of London, he noticed that besides the railway tracks out of London there were great arterial roads stretching out in all directions. They were 120 feet wide, and there were two divisions, one for slow-moving and one for swift traffic. The tramways had been done away with, and the people had wireless telegraphy, wireless telephones, and wireless electric light. There was a belt of green round London, a sylvan glade formed out of various town-planning schemes. All these things were arranged by a Ministry of Art, who, assisted by a large committee of artists, had such matters referred to them. The housing problem had settled itself to a large extent, for, with the increase of facilities for getting in and out of London, people moved out further from the centre. Other improvements he saw and heard of were a Central Government of London, clean sewers, and the protection of old London. In fact this country, like France, had realised that Art was a great asset to any country and any city. On the west side of Trafalgar Square was a noble building occupied by the Ministry of Art, and over the portals was inscribed in bold letters, "Erected by the British Government to the Glory of British Art."

The Surrey Side of the Thames.

The Times of the 23rd inst., referring to the many beautiful features of Sir Aston Webb's vision, has a word to say for the Surrey side as we know it to-day. "It is just possible (it says) that the 'picturesque warehouses' which are to have a place among the 'splendid buildings' along that embankment may save it from being wholly unlike London—which is to say, wholly unworthy of London. Yet, however deliberately picturesque, will they replace what might almost be called the natural beauty of that jagged line of chimneys and towers and roofs which now delights the eye? To etchers and other artists in line the Surrey bank is an inexhaustible storehouse of delicious surprises. French painters know better than English the infinite variety of its aspects under the changing, softening skies of London. To the true Londoner it appeals, not more by its absolute beauty than by the force with which it declares itself to be London."

"London is a city of commerce; a city that has grown, instead of being 'laid out.' The Surrey bank is the visible sign of London's spirit. So far from welcoming the embankment of the Surrey shore, the lover of London would have warehouses opposite the Houses of Parliament, barges unloading the commonest of merchandise at their steps, and tugs (smokeless, if it may be so) wheeling and fussing within a stone's throw of the Terrace. The dull and pompous embankments of the Middlesex shore are there to prove how rich and orderly we are; on the other side the fascinating jumble of lines and masses tells the secret of our wealth. It speaks of men at work, of the homely needs of the body, of fetching and carrying, of making and buying and selling, of the ten thousand common duties, faithfully carried out, by which London has grown through immemorial ages to be the queen of all great cities of all time. To the lover of London this visible soul of London is no eyesore; it is a scene so inspiring and so beautiful that he hates to see it disfigured at night with sky-signs only fit for upstart towns that have no spirit to scare away. And London is a city by the sea. . . . We are in the capital city of an island; all round the shores of that island the ocean is moving. Cross it, if only in fancy, and there are vaster shores and vaster rivers, with the ocean still flowing to and fro about them, and London still their centre. There are many great cities in the world; there is only one London. Destroy her Surrey shore, and she will be so much the less London; so much the more a mere great city."

No. 75 Dean Street: A Plea for the "Arts and Crafts."

It is matter for congratulation that the prompt action of the Office of Works in administering the Ancient Monuments Consolidation and Amendment Act of 1913 has preserved from immediate demolition the fine old house No. 75 Dean Street, Soho. A movement is on foot to secure the building as the permanent home of the Arts and Crafts Exhibition Society, which has contributed so largely towards the maintenance of a high standard in design and workmanship in contemporary decorative art of all kinds. Mr. Edward Warren, F.S.A. [F.], in an admirable letter to *The Times* of the 20th inst., puts forward the following eloquent plea on the Society's behalf:—

The quiet stateliness and harmonious charm of the old house, its fine staircase, its unique painting of wall and ceiling, its panelled chambers and dignified chimney-pieces, its tradition as the home of Thornhill and the haunt of Hogarth, all suggest as appropriate tenants some society of artists to whom its intrinsic beauty and its associations would be of inestimable value. Its newly invested character as a national monument suggests its bestowal upon a society typically national and worthy of national support. The Arts and Crafts Exhibition Society seems to fulfil those conditions in a high degree. That Society is in pressing need of a permanent home if it is to continue and to develop its utility. By all that it has done and is doing to raise the standard of British arts and crafts

it has shown itself worthy, not only of being handsomely housed, but also of being encouraged in work which is of great national importance. It is chiefly due to this Society, and to the group of artists which it represents, that this country has achieved that well-recognised pre-eminence in the decorative arts so fully exemplified in its own periodic exhibitions and in various international exhibitions abroad. The recent and most conspicuous success of the British Arts and Crafts Section at Ghent, and the admiration and interest excited thereby amongst foreign artists, have led to a very general recognition of the necessity of some place of permanent exhibition, so that all the world may know where to go to in order to see the best examples of contemporary British craftsmanship and get into touch with its producers. Continental visitors to London frequently express disappointment and surprise that they can only hope to inspect such productions by undertaking impossible journeys to isolated workshops and studios.

The amplitude of the straight old "garden," or back yard, in the rear of No. 75 would provide space for a well-lit hall very suitable for a continuous exhibition, while some of the fine old rooms could contain a selection of more permanent exhibits, in furniture and the like, and others might be devoted to use as library and lecture-rooms and the necessary offices. The Arts and Crafts Exhibition Society is, like most artistic societies, relatively poor, and would only undertake the occupancy and care of such premises under the guarantee of generous public or private support. An epoch has now been made by this spirited action of a Government Department in the recognition of the national value of a beautiful old house; it only remains to confirm the results of that action with equal spirit in the domain of practical utility by securing its endowed and sympathetic maintenance.

Mr. Walter Crane [*Hon. A.*], the present President of the Society, has followed up Mr. Warren's letter with an equally powerful appeal, pointing out that the Society has numbered among its members most of the more distinguished decorative artists and craftsmen (including eminent architects and sculptors) from William Morris and Sir E. Burne-Jones to the artists of our own day. The teaching in the design and craft classes in the various technological institutes and municipal art schools of the country has been largely in the hands of their members, as well as the judging in the national competition of students' works under the Board of Education.

"But now," he says, "after a quarter of a century's work, our Society finds itself crippled for want of funds. The heavy expenses of our London exhibitions, especially the item of rent of a gallery, have reduced our resources so much that it will be impossible for us to avail ourselves of this suggestion of occupying No. 75 Dean Street unless we are supported financially in some way. It might take the form of guarantees, or a grant of premises rent free by the Government." He adds that their Hon. Treasurer, Mr. St. John Hornby (the producer of some of our choicest printed books), would be very pleased to hear from anyone interested in their work sufficiently to offer financial help.

The Hon. Secretary is Professor E. S. Prior [F.], Slade Professor at Cambridge University.

Architecture and Efficiency.

A lecture, entitled "Architecture and Efficiency," was delivered at Sheffield University last Saturday by Mr. W. S. Purchon [A.], the Lecturer on Architecture at the University.

Mr. Purchon said that the real meaning of the works of architecture of the past was rarely grasped. The ancient Greek temples, for instance, were seen to possess great beauty of proportion and remarkable refinement of detail, and the wonderful buildings of the Romans were rightly admired for their grandeur; but what was seldom grasped was the struggle towards perfect efficiency that was taking place when the buildings were being erected—the attempt to make the very best building for the definite purpose to which the building would ultimately be put. The deeper beauty which lay beneath the surface was rarely seen.

The misunderstandings which had gathered about the art of architecture led to much trouble during the eighteenth and nineteenth centuries, in England and elsewhere. It was seen that the great buildings of the past were full of beauty, but it was not realised how much of their beauty was due to the fact that they were efficient solutions of definite problems—problems in which the local climate, the customs of the times, and the particular sites on which they were created played a considerable part. Instead of seeing their own problem clearly and trying to arrive at the most efficient solution, the architects of the various revivals effected important factors in their own problem so that the general appearance of the building should resemble some famous architectural masterpiece. Unfortunately their method of designing was still lingering on in some quarters, fitting in with another great misunderstanding—that architecture was an art which belonged to distant times and places.

Discussing some present-day problems, the lecturer referred to dwelling-houses, perhaps of all buildings the most important. There were still some sixteen thousand back-to-back houses in Sheffield. How did the accommodation in those houses compare with that in workhouses and prisons? How did it compare with that provided for racehorses? Back-to-back stables were not built. Engineering plant must be efficient, and when superseded, it must be scrapped; but we were not ready enough to scrap out-of-date, inefficient houses, the possession of which was not economy, but a gross extravagance, which gave pleasure to no one and which no community was wealthy enough to afford. Yet he supposed in every community there was a standard below which a house must not fall, or it would be closed as unfit for human habitation. Evidently it was necessary for that standard to be raised, and to be raised considerably.

As regards the general appearance of dwelling-houses, the lecturer said that for a house to be really efficient the front should be beautiful and the back no less so. It was not necessarily more expensive to make a house pleasing in appearance than otherwise. He had seen many a house which could have been built more cheaply and yet made more beautiful.

To a great extent beauty in architecture was a matter of arrangement of forms and proportion, and good proportion was not necessarily more expensive than bad. In addition to the sanitary point of view in the siting of houses, there was an æsthetic side to the question. Long rows of small houses, however well designed, tended to become wearisome and monotonous—and they were rarely well designed.

The problem of the shop was by no means an easy one. So many of the streets of our cities were ruined

by the modern shop-fronts, which consisted of nothing but plate-glass. Fortunately shopkeepers were in increasing numbers realising that beautiful goods showed to better advantage in a beautiful frame than in an ugly one. They were, in fact, actually discovering that there was money in architecture! It was not a lofty argument, but it was a sound one.

Speaking of the refining influence of architecture, Mr. Purchon said he was willing to admit that many intelligent people derived little conscious pleasure from architecture or felt little dissatisfaction at the sight of an ugly building, but he was convinced they were influenced by the buildings which surrounded them, though perhaps without knowing it.

"Architecture," he concluded, "is a matter which concerns all of us, here and now. It is not a matter of going somewhere to see something. It ought to be all around us, and if it is not we ought to want it, and we ought to let our wants be known clearly and definitely. We are thorough in some things: we want the best in machinery, motor-cars, and railway engines, but for some reason we seem more or less willing to put up with terribly inefficient buildings and towns. In Sheffield little thought seems to have been spent in arranging buildings as part of a complete scheme. We have no roads leading up to our main buildings, the stations are buried away as if they were things we must tolerate but do not like, and we have by no means made the best of the opportunities provided by our beautiful situation.

"In judging the success of Sheffield it is not enough to talk about the development of the steel industries. Surely prosperity in such work should lead to the living of fuller and nobler lives, and should show outwardly in the general appearance of the city. I understand we are to have town planning in two suburbs, and a new road here and there, but I firmly believe it is little good doing odd bits in Sheffield. What is needed first is a complete scheme for the ultimate development of the whole city, and our energies ought to be devoted to that rather than frittered away on oddments. If we do the oddments first—as we probably shall—when the complete scheme is considered, as it ought to be now, but probably will be in ten, twenty, or fifty years, the oddments done in the interval will probably have to be scrapped, and during the next fifty years large portions of the city must be rebuilt.

"The whole scheme must be dealt with some day, there is no escaping that. Why not now, before more streets are laid out in the wrong places, before more new buildings are erected where streets ought to be cut through or where open spaces ought to be arranged? Think for a moment what Sheffield would be like now had Sheffielders fifty years ago realised to the full the value of efficiency in architecture, had they tackled the problem with a broad mind, obtained the best possible advice, and developed Sheffield on the right lines during those fifty years. If we think of this I believe we shall realise how our work will be appreciated in, say, fifty years' time if we tackle this great problem thoroughly and now."

"Société Archéologique de France": a Warning.

A Fellow calls attention to the announcement in the JOURNAL of 20th December that an Honorary Associate of the Institute has been elected a member of the "Société Archéologique de France," and to a similar announcement about a Fellow which recently appeared in one of the architectural journals, and suggests that any members who may

be approached by this "society" should be warned to make inquiry before they are induced to join it. *The Athenæum* of the 17th January (p. 98) contained the following paragraph on the subject:—

We are informed that certain persons calling themselves the "Société archéologique de France," and operating from 5, Rue de Mornay, Paris, have been writing to English professors and archeologists and informing them that they have been elected corresponding members, and demanding a payment for the "honour." It may be well to issue a warning that this so-called "Société" is not in any real sense an archaeological society at all, that it has never published any transactions, and that its diplomas are of no value. It should not be confused with the Société française d'archéologie, founded by A. de Caumont in 1834, now publishing its seventy-seventh volume of the *Bulletin Monumental*, and prospering greatly under the able presidency of M. Lefèvre-Pontalis.

"Country Life" Cottage Competition.

It will be remembered that Viscount Milner in his speech at the Opening Meeting of the Session referred to the correspondence in *Country Life* on the subject of cottage design, and the importance of avoiding anything like a standard pattern being used all over the country. In order to emphasise the possibility of building new cottages on traditional lines, *Country Life* has organised an important competition, the full particulars of which were published in its issue of the 10th January. Eighteen landowners, all of them men associated with the attempt to improve housing conditions, have each agreed to build a pair of cottages in their respective counties in accordance with the design which will receive the prize of twenty-five guineas for each type. The eighteen successful competitors will also receive their fees in the ordinary way from the landowners. The date for sending in designs has been extended to the 14th March. Further details are given in the advertisement pages of the present issue of the JOURNAL.

The Alexander Thomson Travelling Studentship.

The Trustees of the Alexander Thomson Memorial offer a prize of £60 for the best set of drawings for a College Memorial Lecture Hall, which should be a detached building, but connected with other parts of the college by open portico, covered corridor, or walk architecturally treated. A prize of £20 will be given for the second best set of drawings should the number of competitors and the quality of the work submitted be such as to warrant an additional prize being given. The competition is open to architectural students between the ages of 19 and 28 years, residing in the United Kingdom. The Trustees are the Council of the Glasgow Institute of Architects, and full particulars may be obtained from the Secretary, Mr. C. J. Maclean, 115 St. Vincent Street, Glasgow.

Garden Cities and Town Planning Association.

The Fifteenth Annual General Meeting of this Association will be held in the Carpenters' Hall, London Wall, E.C., on Monday, 16th February, 1914. At 4 p.m. Mr. Cecil Harmsworth, M.P. (Chairman of Council), and Mrs. Cecil Harmsworth will receive members and friends, and tea will be served. The Annual Business Meeting will begin at 4.30 p.m., and at the public meeting at 5 o'clock Lord Robert Cecil, M.P., will be the chief speaker. There will be a short lantern lecture illustrating the present position of the movement. Cards of admission to the meetings can be obtained from Mr. Ewart G. Culpin, 3 Gray's Inn Place, W.C.

New Public Offices Competition.

It is announced from the Office of Works that 187 designs have been sent in for the proposed new public offices on the Embankment at the rear of the Chapel Royal, Whitehall. Ten designs will be selected for the final competition, and each of the authors will receive the sum of £300. The assessors are Sir Aston Webb, R.A., and Messrs. Reginald Blomfield, A.R.A., and Ernest Newton, A.R.A.

CORRESPONDENCE.

REGISTRATION.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—I find that there is an impression in some quarters that, when speaking at the meeting on 5th January on the subject of Registration, I did so as the spokesman and accredited representative of the Society of Architects. This was not the case, my action both then and in giving notice of motion (afterwards withdrawn) for 12th January having been purely personal. For thirty years the great object of my life has been to see architecture made a closed profession by Act of Parliament, and with that end in view, when yet little more than a boy and when no other possible course seemed open, I assisted in forming and organising the Society. The great work of that body has been the formulation and gradual perfecting of a Registration Bill, and it has been my great anxiety to see that measure placed upon the Statute-book that has led to my recent, as to most of my past, actions: not in order to advertise the Society, but simply because I believe the Bill to represent the requirements of the situation in the most complete and soundest manner, and consider that it is a measure which ought to go forward with universal consent, and not as a party matter. For the Institute to solidify its position by Charter amendments is good, and to the advantage of architecture, but to my thinking no Charter provisions can, in their ultimate effect, at all approach, in the matter of this same architectural advance, what could be secured by Parliamentary action. And I

am by no means pessimistic as to the possibility of securing the passing of a well devised Bill, especially now that the necessity for it, or something as near to it as can be secured, is universally acknowledged.—I am, &c.,

G. A. T. MIDDLETON [A.].

3 Queen Street, E.C. : 20th Jan. 1914.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—I wonder if a mere Licentiate may express opinions upon the above subject? I have carefully read the discussion and have also considered certain literature upon the subject not published in the pages of the JOURNAL. I agree with Mr. Topley, and if I paraphrase one of the sentences of his speech I shall express what I feel to be the fundamental issue. "If the Parliamentary registration movement is to improve the material condition of architects I am opposed to it; but if it is recommended as a measure for improving architecture in this country then I support it."

The discussions which have taken place during the last few years do not seem to me to have made it very clear whether the majority of those who support registration do so in Mr. Topley's spirit, or in a vain hope that they may derive some personal benefit; nor do those who have changed their views let us into the secret as to whether they have abandoned the idea of registration because they now feel that it would be bad for architecture, or merely because it is impossible of attainment.

If registration would be good for architecture, in the opinion of the leaders of the profession, then I cannot imagine why they should give up the idea of eventually attaining their desire because for the moment they are advised that it is impossible. I am personally quite convinced that registration is not practical politics, but as I am inclined to think that registration would be for the ultimate improvement of architecture in this country I do not think that I should definitely give up the idea of some day obtaining it, were I a leader.

In face of the vote given at the Institute on the 5th January last the chances of the success of the crusade of the Society of Architects are set back a generation. Parliament certainly could not grant registration at the request of the Society after such a vote in the Institute. Registration is dead for a generation; all the Institute has to do now with regard to it, is to consider whether the Institute policy shall be shaped to educate to that end, or whether registration would be better buried as far as the Institute is concerned.

If the latter course is the policy of the Institute then the Society of Architects can be ignored, but if the former is the proper course it seems to me quite essential that the Society should modify its crusade (recognising the fact that at least for the present registration is not practical politics) and work hand in hand with the Institute.—Faithfully yours,

JOHN E. YERBURY, *Licentiate*.

THE EXAMINATIONS.

Preliminary.

The Preliminary Examination, qualifying for registration as Probationer R.I.B.A., was held in London and the under-mentioned provincial cities on the 25th and 26th November. Of the 115 candidates admitted, 33 were exempted from sitting, and the remaining 83 examined, with the following results:—

Centre	Examined	Passed	Relegated
London	34	22	12
Birmingham . .	13	11	2
Bristol	9	7	2
Leeds	7	6	1
Liverpool	6	5	1
Manchester . . .	13	7	6
	82	58	24

The 91 passed and exempted candidates are as follows:—

BAKER: Maurice; Portland Villas, Glencoe Road, Sheffield.
 BASTABLE: Francis John Norman; 24 The Grove, Golder's Green, N.W.
 BAYLESS: Cecil Charles; 25 Esmé Road, Sparkhill, Birmingham.
 BEARD: Philip Arthur Edgar; 19 Augustus Road, Hammersmith, W.
 BELL: Fred; 76 Moorland Road, Scarborough.
 BERGE: Arthur Norman; Crescent House, Gravesend.
 BOWEN: William Archer Forrest; "Overdale," Rigby Lane, Bradshaw, Bolton.
 BROWN: James McLellan; Green Street, Stonehouse, Scotland.
 BURNET: Edith Mary Wardlaw; 59 Queen's Road, Aberdeen.
 BUTLIN: Frederick George Montagus; Upton Lodge, Harpenden, Herts.
 CARRUTHERS: Robert Ballantyne; 27 St. Mark's Crescent, Regent's Park, N.W.
 CHASE: Arthur Gordon; 11 Holligrave Road, Bromley.
 CHOLMELEY: Guy Hargreaves; 19 Hamilton Terrace, London, N.W.
 CLAYDON: Lifford; 9 High Street, Tunbridge Wells.
 CLOUSTON: James George; 119 Wise Road, Stratford.
 COCK: Geoffrey Horneblower; Ridgebourne, Shrewsbury.
 COCK: John Charles Pascoe; 8 Maristow Avenue, Keyham, Devonport.
 CONNABERE: Cecil Randolph; "Rozel," 37 Dowsett Avenue, Southend-on-Sea.
 CORDINGLEY: Reginald Annandale; Temple Farm, Temple Road, Sale, Manchester.
 COUCHMAN: Harold William; Mount Pleasant House, Tottenham.
 CREGERN: Cyril Arthur; Oakhurst, Port St. Mary, Isle of Man.
 CRICK: William Edward; Nine Springs, Cliftonville, Northampton.
 CROSTWHAITE: William James; 24 Victoria Terrace, Windermere.
 CUNDALL: Philip; Coniston, Broad Road, Sale, near Manchester.
 DAVIDGE: Henry Edward John; 23 Rydal Road, Streatham, S.W.
 DEY: Birendra Nath; 36 Otago Street, Glasgow.
 DRAMA: Bhanwar Lall; Royal Palace Works, Hyderabad Deccan (Nizam's Dominion), India.
 ERMILE: Cecil Jacob; 9 Aldbourne Road, Old Oak Road, Shepherd's Bush, W.

- FINCH: Walter Badgery; "Croissy," Ferry Street, Hunter's Hill, Sydney, N.S.W.
- FITCH: Cyril Henry; 48 Beauval Road, East Dulwich, S.E.
- FRITH: Henry George; 45 Partridge Road, Cardiff.
- GALSWORTHY: Gerald Richmond; 181 Gloucester Terrace, Hyde Park, W.
- GARDNER: Eric Knight; 15 York Road, Leamington.
- GARLICK: Albert John; 61A Stoney Stanton Road, Coventry.
- GODFREY: Frederick William; 23 Lilyville Road, Fulham, S.W.
- GOURLAY: William; 2 Balmoral Terrace, Queen's Park, Glasgow.
- GUEST: John Eric Cox; Higheroft, Ethingham Park Road, Finchley, N.
- GUNSTON: Edward Leslie; "Alpenrose," Kidmore, near Reading.
- HALFIDE: Frederic William; "Ronda," 47 Prentis Road, Streatham, S.W.
- HAMILTON: Ian Bogle Monteith; 6 St. Alban's Mansions, Kensington Court Gardens, Kensington, W.
- HARDY: Thomas Charles; 15 Carmichael Place, Langside, Glasgow.
- HARRISON: Austen St. Barbe; Ainery, Beckenham, Kent.
- HATTON: John; Wentworth Road, Sutton Coldfield.
- HEMMINGS: Walter; Hill Chorlton, Newcastle, Staffs.
- HOLYOAK: Frank; The Castle, Winchester, Hants.
- HOPKINS: Wilfrid Walter; 52 Teviot Street, South Bromley, E.
- HOWELL: Roland Basil; 14 Glebe Road, Reading.
- HUTCHESON: Thomas Francis Tamplin; The Saffrons, Saffron Walden, Essex.
- IRWIN: Stephen Fenimore; 10 Grange Road, Kingston-on-Thames.
- JONES: George Frederick; 12 Tudor Terrace, Aberdare, S. Wales.
- KELLOCK: Andrew Duncan; 3 Melville Street, Portobello, Edinburgh.
- LANGHAM: Geoffrey Daykin; 46 Kirby Road, Leicester.
- LAWRENCE: Haydn George; 227 Rye Lane, Peckham, S.E.
- LLOYD: Wynell Hastings; 44 Paulton's Square, Chelsea, S.W.
- LOMAX: Alan; 181 Bolton Road, Radcliffe, near Manchester.
- LONDON: Douglas Norman; "Berkeley Dale," Wotton Without, Gloucester.
- LONG: William Dickson; 49 Frederick Street, Sunderland.
- LOVE: Castor Jennings; Irish Street, Downpatrick, County Down.
- LOWTHER: Cyril George Aloysius Benedict; Swindon Villa, Cardigan Road, Bridlington.
- LOWY: Ethel Leah; 76 Holland Park, W.
- MACPHERSON: Archibald Austin; 20 Thirlestane Road, Edinburgh.
- MASON: Basil; Spencer Cottage, Leeds.
- MAYMAN: Edward James; 2 Arthur Place, Summer Hill Terrace, Birmingham.
- MITCHELL: Denis Stuart; 28 Priory Avenue, Hastings, Sussex.
- MOESCH: Carl Eric Wilson; 10 Roslyn Terrace, Douglas, Isle of Man.
- NATLER: Donald Charles; 5 Wellington Terrace, Taunton.
- OSWELL: Harold Lloyd; Dana Chambers, Shrewsbury.
- PALMER: Kenneth; "Kingwood," The Avenue, Sheringham, Norfolk.
- PEARCE: John Morley; 1 Unity Street, College Green, Bristol.
- PHILP: Arthur Thomas; 34 Alderney Street, S.W.
- PHILP: Richard Manning Haig; London Bank of Australia, Ltd., 71 Old Broad Street, E.C.
- PORTER: Douglas Greenslade; 46 Bickenhall Mansions, Gloucester Place, W.
- PROSSER: Donald Sydney; 37 Westbourne Road, Penarth, near Cardiff.
- RECKLESS: Fredrick Henry, jun.; 35 Walton Road, Ecclesall, Sheffield.
- REYNOLDS: Ernest Leoline; Brynteg House, Aberdare.
- ROBERTS: David Henry; 82 Park Street, Wombwell, Barnsley.
- SANDERS: John Edward; 208 Boaler Street, Liverpool.
- SHARP: Francis George; 2 Station Hill, Winchester.
- SHEARER: Thomas Smith; 75 Limerston Street, Chelsea, S.W.
- SINGH: Kirpal; c/o Messrs. Thomas Cook & Son, Ludgate Circus, E.C.
- SMITH: Reginald James Blampsey; "Meads," Priory Road, Kenilworth, Warwickshire.
- SMITH: William Richard Love; 36 Byron Street, Kingsley Park, Northampton.
- STEWART: Cuthbert Bertram; 29 Stanhope Road, Darlington.
- SYKES: Joseph Naylor; Beech Street, Stainland, near Halifax, Yorks.
- WALKER: Alfred Leslie; Englefield, Homer Road, Solihull, Birmingham.
- WATT: William James; School of Architecture, Aberdeen.
- WESTWOOD: Walter Raymond; 306 Rotton Park Road, Edgbaston, Birmingham.
- WILLETT: Sydney; 18 Reynolds Road, Old Trafford, Manchester.
- WISEMAN: Arthur Eric; 26 Broomfield Road, Chelmsford.
- WOOD: Leslie; 12 Waverley Terrace, Hipperholme, near Halifax.
- WOOD: Thomas Spencer; Hawthorne House, Handsworth Wood, near Birmingham.

Intermediate.

The Intermediate Examination, qualifying for registration as Student R.I.B.A., was held in London and the under-mentioned provincial cities from the 21st to the 28th November. Sixty-nine candidates were examined, with the following results:—

Centre	Number Examined	Passed	Relegated
London	43	26	17
Bristol	3	1	2
Glasgow	3	3	—
Leeds	1	1	—
Liverpool	4	2	2
Manchester	12	7	5
Newcastle	3	2	1
	69	42	27

The passed candidates are as follows, the names being given in order of merit:—

[P. = Probationer.]

- BONE: John Craigie [P. 1910]; 45 Marchmont Road, Edinburgh.
- HULL: James Vincent [P. 1908]; Lofthouse, nr. Garstang, Lancs.
- FOSTER: Frank Geden [P. 1910]; 3 The Crescent, Selby.
- BESTOW: Sidney Francis [P. 1906]; 43 Upper Clapton Road, N.E.
- SAXON: Frederick Charles [P. 1908]; 17 St. Alban's Street, Rochdale.
- HENRY: Morrison [P. 1912]; 3 Pitstruan Place, Aberdeen.
- MACKAY: Harry [P. 1910]; 10 Clonmel Road, Fulham, S.W.

HOSSACK: James Davidson [P. 1912]; Bloomsbury House Club, Cartwright Gardens, Tavistock Square, W.C.

HANBURY: Philip Henry [P. 1908]; Glendale, Bloomfield Road, Bath.

BONIFADE: Charley Frank [P. 1906]; "Polperro," King George Avenue, Petersfield.

LYNE: Daniel Roy [P. 1905]; c/o C. J. W. Simpson, Esq., 12 Queen Anne's Gate, S.W.

DOYLE: Edmund Louis [P. 1912]; 39 Esmond Road, Cheetham Hill, Manchester.

PICTON: Clarence Spencer [P. 1912]; 73 St. Donatt's Road, New Cross, S.E.

WARDILL: Reginald William [P. 1909]; Glaisdale, Hill Road, Chelmsford.

GARRARD: Cyril Proctor [P. 1908]; Ivydene, Westerfield, Ipswich.

ASHMAN: Herbert William [P. 1907]; 13, "Linden," Palace Road, East Molesey.

CHURCH: Leslie Donald Algar [P. 1910]; The Homestead, High Road, Epping.

DAVIES: John Percival Wilkin [P. 1907]; 46 St. John's Road, Newport, Mon.

PAICE: Cyril Lawrence [P. 1912]; Aldermaston, Mill Road, Cromer.

GRAHAM: Richard David [P. 1910]; Northern Bank House, Carrickfergus, Co. Antrim.

DUCKWORTH: Alfred [P. 1910]; 341 Blackburn Road, Accrington.

LOWETH: Sidney Harold [P. 1911]; 67 Downs Park Road, Hackney Downs, N.E.

KNIGHT: Shirley [P. 1907]; 4 The Crescent, Phippsville, Northampton.

BISKEE: Arthur Milton [P. 1911]; 60 Crouch Hall Road, Crouch End, N.

SHEENSTONE: Gerald [P. 1910]; "Waveney," 191 Hainault Road, Leytonstone, N.E.

ASHBY: Leslie John [P. 1912]; 308 Mansfield Road, Nottingham.

ROUTLEY: Leonard James [P. 1911]; 17 Cleveland Street, Taunton.

ALCOCK: William John [P. 1912]; The Pinnacles, Shipbourne, near Tonbridge, Kent.

APPLEBY: Sidney Derrick [P. 1910]; "Selwyn," Gilnow Park, Bolton.

ARMSTRONG: John Ramsay [P. 1912]; 24 Ettrick Terrace, Hawick, N.B.

BONNER: Kenneth John [P. 1911]; 100 East Dulwich Grove, S.E.

BRUCE: John Clayton Collingwood [P. 1909]; 12 Lovaine Place, Newcastle-upon-Tyne.

CHERRITON: William George Lloyd [P. 1906]; 20 Mount Ephraim Lane, Streatham, S.W.

GILL: Maurice Bernard [P. 1910]; 150 Weston Park Crouch End, N.

JOHNSON: Arthur Gerald [P. 1909]; 146 Hainault Road, Leytonstone, N.E.

KASSEM: Hussein Zaki [P. 1912]; 17 Egerton Road, Fallowfield, Manchester.

LEADAM: Evelyn Grahame Seaton [P. 1912]; 25 Nevron Square, S.W.

MARTIN: Joseph Parnell [P. 1912]; 90 Southfield Road, Bedford Park, W.

RADCLIFFE: James [P. 1911]; Furlane, Greenfield, c/o Oldham.

STOBHART: Foster Rowland [P. 1911]; "Harewood," Grange Road, Newcastle-upon-Tyne.

TURNER: Thomas Edwin [P. 1906]; 16 St. Matthew's Avenue, Surbiton, Surrey.

WOOD: Arthur Jackson [P. 1908]; 54 St. Nicholas Street, Leicester.

The number of failures among the relegated candidates in each subject of the Intermediate Examination was as follows:—

A. Principal Styles and General History of Architecture	12
B. 1. Simple Applied Construction	14
B. 2. Theoretical Construction	15
C. 1. Historical Architecture:—	
(a) Greek and Roman	3
(b) Byzantine and Romanesque	—
(c) French and English Gothic	—
(d) Italian, French, and English Renaissance	—
C. 2. Mathematics and Mechanics	1
C. 3. Design	16

Exemptions from the Intermediate.

The following Probationers possessing the certificates required under the regulations were exempted from the Intermediate Examination, and have been registered as Students, viz.:—

ADDEY: Frederick Arnold [P. 1910]; 28 Ponywern Road, Earl's Court, S.W. [Architectural Association, Third Year Course.]

BINNIE: William Bryoe [P. 1905]; 7 Alfred Place, South Kensington, S.W. [Senior Certificate, Glasgow School of Architecture.]

BRADSHAW: Harold Chalton [P. 1911]; "Hillside," 30 Heathfield Road, Wavertree, Liverpool. [1st Class Certificate, Liverpool School of Architecture.]

DAVIES: Edward Cecil [P. 1909]; 22 Lansdowne Road, Bedford. [Architectural Association, Third Year Day School Certificate.]

GEE: Ernest [P. 1910]; Cathedral Chambers, Chester. [1st Class Certificate, Liverpool School of Architecture.]

HAMILTON: Ian Bogle Monteith [P. 1913]; 6 St. Alban's Mansions, Kensington Court Gardens, Kensington, W. [1st Class Certificate, University College, London University.]

HOOPER: Arnold Fielder [P. 1912]; Kelsey Corner, Beckenham. [Architectural Association, Third Year Day School Certificate.]

HOWCROFT: Gilbert Burdett, B.A. [P. 1912]; Spring Grove, Uppermill, near Oldham. [Victoria University of Manchester.]

KELLOCK: Andrew Duncan [P. 1913]; 3 Melville Street, Portobello, Edinburgh. [Diploma in Architecture, Edinburgh College of Art.]

MAUTHURSON: Archibald Austin [P. 1913]; 20 Thirlstone Road, Edinburgh. [Diploma in Architecture, Edinburgh College of Art.]

NEUBOULT: Bernard [P. 1911]; Thorn Lea, Shipley, Yorks. [1st Class Certificate, Liverpool University.]

PHILP: Richard Manning Haig [P. 1913]; London Bank of Australia, 71 Old Broad Street, E.C. [Architectural Assoc., Third Year Day School Certificate.]

SHIMLEY: Albert Reginald Slater [P. 1911]; Belmont, Waterbank Road, Sheringham, Norfolk. [1st Class Certificate, Liverpool University.]

TEHRUTE: Henry Jenson [P. 1910]; Architectural Association, 18 Tufton Street, Westminster, S.W. [Architectural Association, Third Year Day School Certificate.]

VINCENT: Sybil Aimée [P. 1910]; 78 Hampstead Way, N.W. [1st Class Certificate, University College, London.]

WALLACE: Robert Stuart [P. 1910]; 18 Marlborough Place, London, N.W. [Architectural Association, Third Year Day School Certificate.]

WHITEHEAD: Henry Montagu [P. 1910]; 18 Boston Road, Brentford. [Architectural Association Four Years' Course.]

WILSON: Joseph [P. 1913]; 6 Jedburgh Gardens, near Kelvinside, Glasgow. [Diploma, Glasgow School of Architecture.]

Final and Special.

The Final and Special Examinations, qualifying for candidature as Associate R.I.B.A., were held in London from the 4th to the 12th December. One hundred and seventeen candidates were examined, 63 passed, and the remaining 54 were relegated. The passed candidates are as follows:—

ADAMS: Laurence Kingston, M.A. Liverpool [S. 1906]; Wyndeliffe, Westbourne Road, Birkdale, Lancs.
 AYLWIN: Guy Maxwell [S. 1911]; 44 Fortune Green Road, West Hampstead, N.W.
 BASKEVILLE: John Allbut [S. 1908]; 19 Delaunay's Road, Crumpsall, Manchester.
 BENNETT: Philip Dennis [S. 1911]; 52 Farquhar Road, Edgbaston, Birmingham.
 BIRKSTINGL: Harry Joseph [S. 1912]; 5 Pembroke Gardens, Kensington, W.
 BOX: Charles Wilfrid [S. 1909]; The Vicarage, South Benfleet, Essex.
 BULL: Joseph William [S. 1912]; 2 Tokenhouse Buildings, Bank, E.C.
 CALVERT: Charles Henry [S. 1908]; 18 Low Pavement, Nottingham.
 COOK: John Oliver, jun. [S. 1904]; "Laleham," Clarence Road, Clapham Park, S.W.
 COOPER: James Gough [S. 1912]; 19 Chorley New Park, Bolton.
 CROMIE: Robert [S. 1909]; c/o W. Darlington, Esq., Clevedale, Great Malvern, Worcestershire.
 CRONE: Harold [S. 1911]; 10 Great Ormond Street, Bloomsbury, W.C.
 CULLIFORD: Leonard Arthur [S. 1909]; 8 Meriden Street, Coventry.
 DAVIDSON: Oswald Ferguson [S. 1908]; The Bungalow, Roseworth Avenue, Gosforth, Newcastle-on-Tyne.
 DAWSON: William Frederick [S. 1907]; "Fildesfold," Lidgett Lane, Gledhow, Leeds.
 DOD: Harold Alfred [S. 1909]; 24 Liverpool Road, Birkdale, Lancashire.
 ENGLAND: Ernest Sugden [Special]; 95 Greengate Street, Oldham.
 FISHER: Stanley Howe [S. 1911]; "Elmsthorpe," 37 Barrington Road, S.W.
 FOGGITT: George Herbert, A.R.C.A. [S. 1907]. Tite Prizeman 1911; Ashfield, Yeadon, near Leeds.
 FRISKIN: William Wallace [S. 1913]; 182 Kensington Park Road, Notting Hill, W.
 GAYMER: Bernard Preston [S. 1912]; "Birchwood," North Walsham, Norfolk.
 GIBBS: Harry Beckett-Swift [S. 1911]; 7 Riverdale Road, Sheffield.
 GRICE: William Stanley [S. 1911]; Chapel House, Mattock Lane, Ealing, W.
 GUTTERIDGE: Richard Howard [S. 1912]; 150 Cheapside, E.C.
 HARRIS: Philip Capes [S. 1910]; 23 Parliament Hill, Hampstead, N.W.
 HARTMANN: Emil Herbert [S. 1908]; 10 Lancaster Place, Strand, W.C.
 HATCHARD-SMITH: William Hornby [Special]; 76 Watling Street, E.C.
 HAWLEY: Charles Dearman [S. 1908]; 65 Harlesten Gardens, N.W.
 HEAL: Albert Victor [S. 1910]; 3 St. Stephen's Gardens, E. Twickenham.
 HITCH: John Oliver Brook [S. 1913]; 60 Harleyford Road, Vauxhall, S.W.
 HOLLAND: Harry Dawber [S. 1909]; 349 Spring Bank, Pemberton, Wigan.
 HUGHES: Vernon Hugh [S. 1911]; "Corunna," Sandgate, Kent.

JELLEY: Frederick Richard [S. 1909]; 5 Bath Place, Bayswater, W.
 JONES: George Howard [S. 1905]; 90 Fawnbrake Avenue, Herne Hill, S.E.
 JONES: Herbert [S. 1909]; Oaklands, Wellington Road, Whalley Range, Manchester.
 JONES: Walter Sydney [S. 1910]; "Ingham," Helland Avenue, Sutton, Surrey.
 KIMPTON: Charles Stanley [Special]; Sunningdale, Ascot.
 KNAPP-FISHER: Arthur Bedford [S. 1909]; 28 St. Mary Abbott's Terrace, Kensington, W.
 LEIGHTON: Henry Birkett [S. 1912]; 68 Upper Albert Road, Meersbrook, Sheffield.
 LOWCOCK: Arnold [S. 1910]; Poplar House, Dronfield, near Sheffield.
 LOWES: Albert Edward [S. 1910]; 31 Swindon Terrace, Newcastle-on-Tyne.
 MACKEILLAR: Robert Norman Houghton [S. 1912]; 3 Cathkin Road, Langside, Glasgow.
 MANN: Henry William [Special]; Chignall House, Witham, Essex.
 MATTHEWS: Harold Ewart [S. 1906]; 300 Utttoxeter Road, Derby.
 MOERDIJK: Gerard [S. 1911]; 137 Brocknock Road, N.W.
 NEWHAM: Theodore Nelson [S. 1909]; 79 Sumatra Road, West Hampstead, N.W.
 PATERSON: William [S. 1913]; 3 Hope Park Terrace, Edinburgh.
 PODOCK: Percy Willmet, jun. [S. 1909]; The Beeches, Egham.
 POWELL: Herbert Cecil [S. 1907]; Cheetham Hill, Melton, Stockport.
 PRITCHARD: William, P.A.S.I. [S. 1905]; 6 Highfield Road, Rock Ferry, Cheshire.
 ROGERS: Cecil Walter [S. 1912]; 15 Enmore Road, Putney, S.W.
 RUSSELL: Robert Tor [S. 1909]; 11 Gray's Inn Square, W.C.
 BUTTER: William Arthur [S. 1909]; 90 Tachbrook Street, Westminster, S.W.
 SALISBURY: Stanley [S. 1901]; Limbrick Hall, Harpenden, Herts.
 SCOTT: Theodore Gilbert [S. 1910]; 24 Castle Meadow, Norwich.
 SMITH: Edwin [S. 1907]; 123 London Road, Neath, S. Wales.
 STANTON: Stephen James Bridges [Special]; 47 Cavendish Road, Brondesbury, N.W.
 TEBBS: Charles Edward [S. 1913]; 24 Llanthewy Road, Newport, Mon.
 THOMPSON: William Harding [S. 1909]; 21 Earl's Court Square, Kensington, S.W.
 WALTER: Robert Albert [S. 1911]; 46 Cavendish Road, Harringay, N.
 WARNES: Claude Cornelius Tom [Special]; 19 Dalziel Place, Edinburgh.
 WOODWARD: Frank [Special]; 13 Southampton Street, Strand, W.C.
 YETTS: Lawrence Muskett [S. 1911]; 45 Finsbury Pavement, E.C.

The number of failures among the relegated candidates in each subject of the Final Examination was as follows:—

A. Design	42
B. Construction—	
(1) Foundations, Walls, Roofs, &c.	25
(2) Iron and Steel	37
C. Hygiene	34
D. Properties and Uses of Building Materials	20
E. The Ordinary Practice of Architecture	32
F. The Thesis	15

The Final : Alternative Problems in Design.

The Board of Architectural Education announce that the designs submitted by the following students who are qualifying for the Final Examination have been approved :—

SUBJECT XII.

(a) DESIGN FOR A LIGHTHOUSE.

Addy : F. A.	Bagenal : H.
Binnie : W. B.	Burnett : A. S.
Callander : G. W.	Carey : J.
Carreras : L. E.	Comser : G. A.
Davidson : A. E.	Davidson : G.
Davies : E. C.	Davies : H. F.
Dicksee : H.	Duncan : R. A.
Elsworth : L. A.	Fowell : J. C.
Grant : J. D.	Hooper : A. F.
Howard : S. B.	Langdell : G. A.
Leigh : H. G.	Philp : R. H.
Preston : E. C.	Robertson : A. W.
Robinson : N. S.	Silecock : A.
Whitehead : H. M.	Williamson : F.
Wood : A. J.	Wallace : R. S.
Weekes : N. B.	

(b) DESIGN FOR A GOLF CLUB HOUSE.

Adams : P. J.	Allison : W.
Andrew : H.	Aslin : C. H.
Blackford : J.	Barrowcliff : A. M.
Cawkwell : R.	Brueton : B. F.
Cheek : C. C.	Charles : H. L.
Clarke : J. A.	Clark : C. J. K.
Darley : F. A.	Crossland : H. E.
Dotto : A. L.	Dickinson : J.
Dyson : V.	Eaton : G. M.
Farrer : J. C.	Fincham : E.
Ford : L. S.	Garrett : S. C.
Goodwin : H. T.	Gray : G. H.
Head : G. L.	Jenkins : T. T.
Jepson : H. N.	Layken : H. M.
Matthews : J. B.	Lone : R.
Moss : D. J.	Maxwell : A. E.
Rowntree : C.	Pennington : W. F.
Sanders : T. A.	Rubery : S.
Shewin : Miss Mary	Shattock : L. H.
Terrell : W. E. W.	Soper : S. G.
Threadgold : R. A.	Thorpe : A.
Triscott : H. S.	Toothill : J. C. P.
Watt : J. D.	Walker : D. W.
Wilson : J. F.	Whitehead : P.
	Wright : C. B.

Licentiatees and the Fellowship.

The following Licentiatees have passed the Examination qualifying for candidature as Fellows :—

BUCKLAND : Herbert Tudor ; Norwich Union Chambers, Birmingham.
CLAY : George Felix Neville ; Board of Education, Whitehall, S.W.
DEACON : Basil Charlton ; 21 Market Hill, Luton, Bedfordshire.
HAYWOOD-FARMER : Edward ; Norwich Union Chambers, Birmingham.
FOSS : John Henry Beart ; 16 Great Marlborough Street, W.
HALLEY : James Mitchell White ; 9 Bedford Row, W.C.
LINES : Roland Walter ; Macdougall Avenue, Edmonton, Alberta, Canada.

COMPETITIONS.

Barnsley Town Hall Competition.

Members and Licentiatees of the Royal Institute of British Architects are advised that the conditions of the above Competition are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions, and that the Competitions Committee are in correspondence with the promoters with a view to their amendment.

IAN MACALISTER,
Secretary R.I.B.A.

MINUTES. VI.

At the Sixth General Meeting (Business) of the Session 1913-1914, held Monday, 26th January 1914, at 8 p.m.—
Present : Mr. Reginald Blomfield, A.R.A., *President*, in the Chair ; 23 Fellows (including 9 members of the Council), 52 Associates (including 1 member of the Council), 3 Licentiatees, 1 Hon. Associate, 35 Students, and numerous visitors.

The Minutes of the Meeting held 12th January [JOURNAL, 17th Jan., p. 176] being brought forward for confirmation, the 5th paragraph from the end was corrected so as to read : " On the motion of Mr. Edward Greenop [F.], paragraph (b) of Clause 1 was amended so as to read as follows : ' (b) The fees for any additional works executed under the original contract or order are charged at the percentage rate fixed by the graduated scale applicable thereto.' " The Minutes were then confirmed and signed as correct.

The decease was announced of Walter Liberty Vernon, Government Architect of Sydney, New South Wales, elected Fellow 1886; and Charles Valentine Hunter, elected Associate 1879, resigned 1912.

The following Associates attending for the first time since their election were formally admitted by the President :—Francis Pickmere, David John Chisholm, Thomas Spencer, Richard Glazier.

Colonel Sir Herbert Jekyll, K.C.M.G., having read a Paper on LONDON TRAFFIC PROBLEMS, a discussion ensued, and on the motion of Colonel Hellard, C.B., seconded by Mr. Raymond Unwin [F.], a vote of thanks was passed to him by acclamation.

A letter was read from Sir Aston Webb, K.C.V.O., C.B., R.A. [F.], suggesting the passing by the Meeting of a Resolution embodying Sir Herbert Jekyll's proposition [see p. 186] of a Central Authority to deal with arterial roads; and on the motion of Mr. Raymond Unwin [F.], seconded by Mr. George Hubbard, F.S.A., *Vice-President*, it was unanimously

RESOLVED, That this Meeting of the Royal Institute of British Architects is of opinion that a Central Authority is urgently required, with power, first, to lay down the lines of arterial roads; and, secondly, to require Local Authorities to make their schemes conform to prescribed lines which happen to traverse their areas.

It was further resolved that this Resolution be forwarded to the authorities concerned.

The Deed of Award of Prizes and Studentships 1914, made by the Council under the Common Seal, was read by the Secretary, and the sealed envelopes bearing the mottoes of the winners were opened and the names declared.

The proceedings then closed and the meeting terminated at 10.20 p.m.



ADDRESS TO STUDENTS.

Delivered by the President, Mr. REGINALD BLOMFIELD, A.R.A., at the General Meeting of the Royal Institute, Monday, 9th February 1914.

I HAVE again the pleasant task of addressing you, students, on your work; and, after the somewhat strenuous times through which we architects have been passing lately, it is a relief to return to our art itself, and to think of what, after all, is the end and object of all our endeavours—even of those differences which I hope soon to see happily settled—namely, the improvement of that architecture for the furtherance of which this Institute exists. We have, I am glad to say, some able designs sent in this year, and some very remarkable drawings. I note with regret that the study of old work appears to attract our students less than it used to, but Mr. Cave will follow me with a critique on the work in this year's competition, and I invite your very careful attention to what he has to say. I have only one warning to give you, on a point on which I think you will hear more from him, and that is, the danger of relying on draughtsmanship rather than on solid design. Mere draughtsmanship is fascinating in itself—personally I appreciate it keenly—but I confess to feeling a little uneasy at the inordinate pains and skill that are now devoted to working up your designs into brilliant drawings. Recollect that the brilliancy of your drawings has no sort of bearing on the quality of the building, the creation of which is the *raison d'être* of all your drawings and designs.

But now that I have fired off this warning, let me add that I find here solid design as well, and that I am sanguine as to the future of architecture in this country, if only our students will continue to approach it as an art and devote to the mastery of its technique an application not less keen and persistent than that which is recognised as indispensable in the pursuit of the sister arts.

Architects must be getting pretty well case-hardened by now to unfavourable criticisms on their art. Modern architecture has recently been arraigned in a well-known daily paper, and quite a pretty storm in a tea-cup has been the result. First, we were told that our only hope of salvation was to leave everything to the workman, in what our critic supposed to be the manner of mediæval building. Dislodged from that position he shifted his ground, and expressed in most eloquent terms his admiration for Greek Classic, even going so far as to annex methods of thought and expression in regard to it that have for years been almost commonplaces among serious architects. But, again, so that there should be no mistake as to the worthlessness of the modern architect, he treats

the Classic architecture of Rome and the Renaissance with the utmost contumely, not excepting the architecture of France and England; tells us that it was incapable of expressing emotion, or any of the deeper feelings of the soul; and, regardless of the history of the seventeenth and eighteenth centuries, asserts that this Neo-Classic never had, and never could, win for itself national recognition and assent. No place of repentance was left for the architect, though he sought it carefully and with tears. Replies were made to this attack by architects, but except in the case of one brilliant writer who is not an architect, our critic has ignored these replies, and fulminates on the barrenness of modern art in general, and the futile practice of the modern architect in particular. I do not think, Gentlemen, that this little controversy has made any difference in the position. The points that our critic made are points that have been made before in the interminable controversies that have raged since the break-up of the Classical tradition; and the references in his last reply to "Art and Life" are but echoes of the early days of the Arts and Crafts movement, when a serious effort was made by Morris, Cobden Sanderson, and those of us who were associated with those men, to put into terms the relations of Art and Life, to show that, if Art was to mean anything, there must be more behind it than a fashion and a trick. Indeed the very term "Art and Life" was part of the title of a volume of essays issued by members of the "Arts and Crafts Society" in 1897. It is a good thing to clear the air now and then and get these things off one's chest, and we are grateful to our critic for having given us the opportunity of dragging some mischievous fallacies out into the open. Otherwise, things are where they were before; and there is no necessity for the aspiring young architect to burn his books and break his T-square, or to start in to spoil good building material by his unskilful efforts, merely because he does not happen to live in the days of Villard de Honnecourt; or to abjure the building art altogether because he happens to live in the twentieth century and not in the age of Pericles. There is an excellent and simple text for artists, as for other working men: "Whatsoever thy hand findeth to do, do it with all thy might,"—and, I may add, decline to be entangled in literary cobwebs, however beautifully spun. The wise man does not quarrel with his environment; he tries to make the best of it.

The foundations on which our methods are based are not quite so shaky, so purely arbitrary, as our critic would have his readers believe. Apart from external tradition, apart from the legacy of the architecture of the past in actual buildings, in every artist there has to be taken into account his own individuality, his temperament, his habit of mind, a certain quality which appears in every expression of his life. That temperamental basis is itself partly the result of heredity; it may contain within itself the germs of long-buried instincts, only waiting for the spark of opportunity to kindle into vigorous life. A famous French surgeon and man of science, who died last year, pointed out, among the last of his utterances, that our thought and our discoveries are often only "the *résumé* of observations of the past, not only of the past from which we directly derive our instruction, but of a past of which we have no conscious knowledge." Are we to turn our back on this? Are we to repudiate all that makes us what we are—that which we have in ourselves, and that which we have acquired by education: *naturam expellas furca, tamen usque recurret*. The genuine Romantic will remain a Romantic; the born Classic cannot escape his instincts, his longing for simplicity of statement, for order, balance, and proportion, for the ascetic austerity of the highest art. Those who have studied the development of modern architecture in this country with intelligence and sympathy are aware of a certain definite drift of opinion among varying minds. Men have come together to the same standpoint without conscious thought of doing so. Recollect how Norman Shaw came right out of Gothic to the Neo-Classic of his later days. Shaw possessed one of the keenest and most vital intellects that I have ever come across. He was not the man to change his methods on a mere caprice, but he did change them in obedience to his own instincts and to a feeling that was in the air, and that is daily gathering force and giving stability to the architecture of this country.

I recollect my own beginnings, if you will pardon my referring to them. When I began the study of architecture, I was introduced to a somewhat arid form of Neo-Gothic, which proved inadequate and meagre fare. Romanesque, which seemed for a time an alternative, proved to be incompatible with the conditions of modern practice, with those vertical and horizontal lines which are, in fact, as Mr. MacColl has pointed out, the problem of the modern designer. As one got some sort of an idea of the structural purpose and possibilities of these and other methods, it was borne in on one that the Column and Lintel of Greece and the Arch of Rome were the real materials out of which an architecture could be formed that would respond to modern conditions, and then the whole of one's reading at school and college and elsewhere came in to clinch the bargain. My experience is probably that of many of my colleagues. Not consciously and deliberately, but by the steady logic of facts acting on their individual temperaments, they have arrived each at their own idiom, which they neither would nor could change any more than the language that they use.

The results are imperfect, but one step I believe we have made to the attainment of genuine architecture, and that is: we have learnt to think in terms of architecture—we no longer take up a style like a new coat. Personally, I hold that behind every national architecture lie causes deeper than climate, or even material, social, and economic conditions, and they are what I have ventured to call elsewhere the root instincts of the race, instincts which assert themselves not in one style only or in another, but in all the varying methods of expression that succeed each other in a nation's history. We call them vaguely tradition, perhaps inaccurately so, because tradition only refers to the handing on from one generation to another. My view is that tradition itself is only a symptom and evidence of deep-seated underlying instincts which will assert themselves from time to time so long as the race is vital, and which can only fail to do so when the life of a race is dead.

This is why the lamentations on the decrepitude of architecture and bleatings on the spread of materialism leave me cold. The race is still as vital as ever. Year after year gallant deeds are done in places far remote from our humdrum London. I believe there are as good fish in the sea as ever came out of it, but we can't expect them to appear on the surface all at once. I think that you, Gentlemen, who are beginning your careers may possess your souls in patience, and can pursue your art without the paralysing suspicion that, after all, it is no good. It will be all the good in the world if you address yourselves to your labours in the spirit of the true artist, sparing no pains to equip yourself at every point, to really master your technique. And as to styles, don't worry about them. Each man who has anything to say must have a style—that is, a peculiar manner of his own. All I ask you to do is to study deeply and widely before you pronounce definitely and dogmatically for any one method rather than another. Make quite sure that you really understand it, that it is not merely a court suit to be taken on and off, but a part of your intellectual and emotional life.

I have had the honour of addressing you, students, before in this room on the course of your studies, and you, my colleagues, on the position and probable tendencies of modern architecture, and my remarks have of necessity been of a practical character. The practice of a modern architect is so complex that there are many branches of it which have little to do with architecture, but demand practical business aptitude and high integrity. I am glad to say our calling has never lacked such men—men that hold a high and honourable place in our esteem. But to-night I am not dwelling on this aspect of our work. I am thinking of architecture as a fine art. You students are entering on a great calling. You desire to enrol yourselves in the ranks of famous men who from time immemorial have practised our splendid art.

Now there are two conditions of success or failure, and by success I do not mean the building up of a plethoric practice—I mean the development of the artist himself, that *εὐπύρα* or self-realisation which is the aim of every true artist. The conditions are: natural aptitude for the art, and enthusiasm and faith in your art. It should be recognised far more clearly than it is in modern life that an artist is *ipso facto* a rare and exceptional being, and his work a fruit that does not grow

on every tree. Other men may be able in commerce, more skilful in administration, more efficient in action. They will find themselves and their work. But here and there is found one with exceptional imagination, observation, skill of eye and hand, who sees in the common aspects of things, in form, in colour, deeper meaning than is revealed to others; who, if he is a painter, finds in what to an ordinary man is a pleasant landscape new possibilities of colour and form; or, if he is an architect, catches in the plan and purpose of a building possibilities of rhythm and proportion, of mass and composition, that would never occur to minds of narrower range, not trained to search for these qualities, or to endeavour to embody them in the visible forms of building. Special qualities and endowments are necessary if a man is to become a good architect which are not necessary in the case, say, of what is generally called business. I do not want to discourage you by putting up an impossible standard; all I suggest is that there should be, to start with, some such aptitude as I have sketched in order that your labours may not be in vain, and result in disillusionment when it is too late to turn back. That you students, winners of prizes and others too, possess this aptitude I am convinced by the work of yours that I have seen.

The second condition that I gave you is enthusiasm and faith in your art. Now I do not want to pitch the note too high. We all of us take up the art with the idea of making our livelihood by it, and our ideals have to be subordinated to the stern realities of life. The point I wish to make to you is that this, though of necessity a dominant motive, should not be the only one. The true artist, the true scholar, the true sportsman, have this in common: that they pursue their aims not for ulterior objects, nor for the profits that may accrue, not even for the reputation they may gain, but for love of the thing itself. The artist who studied his modelling with the implacable passion of Zola's tragedy, the scholar who stated with joy that he had found a rare Greek tense "lying snug in Polybius," the sportsman who takes his risks for the thrill of action at its tensest pitch, do these things for the joy of doing them. And this is the spirit with which, through good report and evil report, you students must keep in touch if your work is to live, if it is to be the sincere and genuine expression of yourselves, if the tares are not to spring up and choke the seed that fell upon good ground in the far-distant past.

My Address is getting dangerously near to a sermon. I expect I am not the first occupant of this Chair who has been anxious to give his message to the younger generation. Yet I have a feeling that opinion nowadays is too fluid, that it moves too fast, and that when the air is highly charged, as it seems to be now, the danger of running after some new thing may increase at an alarming ratio. I have endeavoured to reassure you as to what I hold to be an entirely false alarm, but that does not mean that there are no dangers in your path. There are, but they are the old ones of the broad and easy road. My text is the familiar one adopted by the winner of our Prize Essay to-night, "*Per ardua ad astra*," and I should not offer it to you had I not confidence in your enthusiasm, if I was not convinced that I am only putting into terms what is in the hearts of all of you. The future rests with you, not with us, your seniors; it is for you to show yourselves worthy of the trust we place in you.

REVIEW OF THE DESIGNS AND DRAWINGS SUBMITTED FOR THE INSTITUTE PRIZES AND STUDENTSHIPS 1913-14.

By WALTER CAVE [*F.*]

Read before the Royal Institute of British Architects, Monday, 9th February 1914.

MR. PRESIDENT AND GENTLEMEN.—It was not without considerable hesitation that I accepted the honour of reading a Criticism on the designs submitted this year for the various Prizes and Studentships. Not only is it a somewhat thankless task for anyone to undertake, but, in my own particular case, I cannot help feeling that one who has never competed for any of these prizes can perhaps hardly realise all the difficulties of attempting to set out on paper an imaginary design called up by the few lines of printed matter somewhat vaguely set out in the programme. I am well aware that this vagueness is intentional, and to some it is a spur to the imagination, as can be plainly seen on the walls, where the spirit conceives of magnificent mountain gorges with foaming torrents waiting to be constrained by architectural skill into ornamental fountains—"The Golden Gorge of Dragons spouting forth a flood of fountain foam"—or where the site for a palace on a rocky spur of an apparently inaccessible mountain range is so handled that the buildings appear part of the very mountains themselves. All honour to those whose imagination can escape from the ordinary conditions of building in these days. It is a splendid exercise, and if in the future they find that local conditions and money restrain their high flights, surely they will have benefited by these student exercises. To others whose imagination cannot run riot, the lack of conditions and restrictions seems to act as a kind of paralysis, and their designs suffer in proportion as they take the line of least resistance.

As I understand it, one of the great benefits in these competitions is the training of the mind to clearly see the design as a whole before putting pencil to paper. This applies equally to the great monumental works and the smaller problems which the student will encounter hereafter, and without this power there is likely to be little success.

I cannot help mentioning two tendencies which appear to be gaining ground amongst the students of to-day.

First, there appears to be a general falling off in the study of old work, and a neglect of the traditional forms of design. Originality which means ignorance of what has been done before is rarely successful. Originality to be successful can only be achieved by a careful study of the past, and for a student it is the only right method to adopt. Measure and draw the fine work of our ancestors, and so the tradition will be carried on and upwards, and your buildings will rest on sure foundations.

Secondly, do not be carried away by mere draughtsmanship, which is not design. It is no doubt very fascinating, but look at the walls of the Architectural Room at the Royal Academy and you will see that they have lately become a mere water-colour show and that the more solid architectural design is being neglected.

It is a matter of regret that only 31 competitors have sent in drawings this year, as against 79 in 1913; but the reasons are not far to seek. The Rome Scholarship has no doubt occupied much of the time of many who would otherwise have competed, and the quarterly designs which are taking the place of the Testimonies of Study in our Examinations must have had the same effect.

It is a pity that there are no entries for the Owen Jones Prize, but the decision of the Council to confine this prize to members of the profession is probably the cause of this, so the Kensington students, amongst others whose beautiful work was so often seen on our walls, could not compete.

A gratifying feature of the competitions this year is the success of the Royal Academy Schools, which have lately been showing such an improvement. The Architectural Association and the

Liverpool Schools have established their reputations, and now the Royal Academy Schools have assumed a position which should be theirs by right, and I am sure all of us will welcome their success.

THE SOANE MEDALLION.

We will begin with the Soane Medallion: "An Official Country Residence for a Royal Personage in the United Kingdom." In this competition we have several designs of great merit and exceptional interest.

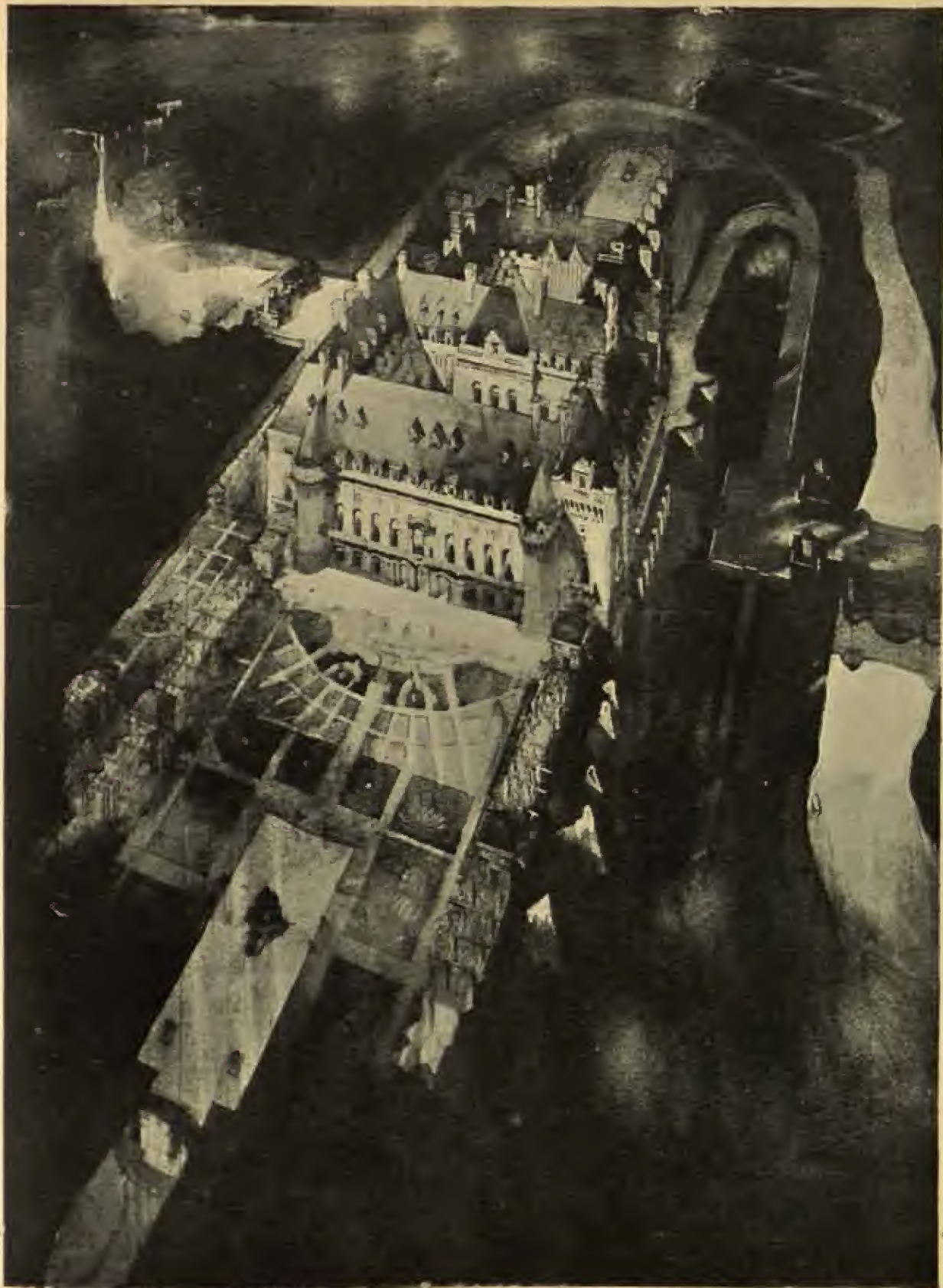
Beginning with that over the badge of the Thistle, we have a fine Royal residence on a fine site, evidently in the highlands of Scotland. The approach across the river, with its well-arranged roadway ascending the hill, gives a noble entrance to a noble residence. The plan of the house situated on this great spur of rock, built round two courtyards, with the stables to the north and the gardens to the south, is truly royal in character, and is shown by a set of really beautiful drawings. It would take too long to go over all the fine details of this design, but from the sections it appears that all the principal rooms have been carefully thought out, from its great ballroom, with its deeply coffered ceiling and ingenious gallery, to the soberly designed chapel with its simple but effective organ. I should advise all students to study the sections in this building, which are drawn in a masterly manner, and, although showing the utmost detail, are in no way confused.

Coming next to the design by "Farnesina," we have a very different setting for our palatial residence, and it appears to me to be set under Italian skies rather than in the cold grey atmosphere of the British Isles. The plan of the house does not appear to me to be so satisfactory in its arrangements as that of the last mentioned. Take, for instance, the library, which has no wall-space for books, which would have to be accommodated in the centre of the room in bookcases which would sadly obstruct the light. On the entrance elevation the central portion of the building seems to have little relation to the façade overlooking the lake. No doubt this is partly due to the difference in level between the forecourt and the terrace on the other side, but the contrast, I think, is too great to be satisfactory. The windows also appear too small, though we can all appreciate the value of plain wall surfaces; and it is doubtful if the two square blocks containing the palm and kitchen courts would be really pleasant in execution.

The design signed by "Anchor" represents a typical English country house in the "grand manner," situated in a flat English park. The plan is noteworthy as containing regal apartments and fine vistas. A novel, and I think a very satisfactory arrangement, is the placing of the stables and garage on each side of the approach to the forecourt and connected to the house by a well-designed arcade. The general lay-out of the grounds to the south is also very satisfactory, with the terrace and steps leading down to the river. A criticism in detail may be noticed in two arcaded recesses on each side of the entrance front which are somewhat awkwardly carried across the dome of the chapel and billiard room. The amount of cellarage may also be criticised, and if this is an indication of the taste of the Royal personage who should perchance inhabit this palatial residence, it would be a bad augury for a long reign. The drawings generally are clear and restrained, and the $\frac{1}{2}$ -inch detail shows refinement and skill without affectations.

In "Akarana" we have a Royal residence which, to my mind, is less adaptable to an English landscape than the last. The plan here is somewhat confused by showing the design of the ceilings to such a small scale, and the somewhat awkward arrangement of the sections and elevations makes it difficult to follow the internal construction and general system of internal lighting. The lettering also on the plans leaves something to be desired in the way of clearness. On the whole it is a stately building, but, as I prefaced my remarks, scarcely English in character.

"Cornucopia": As a plan this contains many interesting features, especially the arrangement of a corridor round the banquetting chamber, which presumably is intended to facilitate the waiting on state occasions, although the dinner would get sadly cold in being carried down the corridor from



THE SOANE MEDALLION 1914: FROM MR. CYRIL A. FAHEY'S DESIGN FOR AN OFFICIAL COUNTRY RESIDENCE FOR A ROYAL PERSONAGE.

the kitchen block. The library is well-arranged with bookcases projecting at right angles from the walls, which always makes a satisfactory plan. Only one plan is given of the principal floor, which shows a scarcity of bedrooms for a country house on such a large scale. One cannot help feeling that the approach to this mansion would be somewhat spoilt by the placing of the kitchen and stable buildings in such a prominent position.

"E X V L" has a plan on somewhat similar lines, though here again the stables and garages appear to me to be situated too near the residence. It is not very clear how the kitchen is lit and ventilated, being under the portico on the south-west side. The principal façade is a nice harmonious composition, though the chimney stacks appear somewhat too lofty.

The design above "X X X" appears somewhat too broken up and lacking in dignity. The shapes of the towers and lanterns are somewhat unfortunate. The plan appears somewhat complex, and the landing half-way up the staircase from the entrance would be uncomfortably low.

"Halibut" has a design of a building situated at the foot of a hill facing the south-west. The lay-out of the gardens and terraces, &c., on that side are somewhat confused. The plan again is wanting in clearness on account of the amount of detail of all the ceilings and their decorations which is shown thereon. The plan is altogether, in my mind, too ambitious, and partakes more of an institution than a country house. The carved ornaments shown on the $\frac{1}{2}$ -inch detail are somewhat meaningless in character. It does not appear to me that it would be a comfortable house to live in.

THE TITE PRIZE.

Next we will take the Tite Prize, the subject for which was a Monumental Fountain.

Several of the drawings for this prize represent cascades rather than fountains. Take "Golden Dolphin" for instance; you will notice that the water scheme consists mainly of a vast cascade running over an only slightly inclined surface, broken up into ridges to give life to the water before it descends in a waterfall into the basin below. It is true there are certain jets in the basin from isolated figures which are, to my mind, the real fountains. I think the lines of the lower basin are somewhat weak, and the sculpture generally is somewhat insignificant. The central feature is a flat dome surmounted by a quadriga, the whole of which is not very satisfactory in outline, and the staircases on each side, to gain the upper level, finish somewhat uncomfortably against the massive walls of the terrace; but, on the whole, the water controls the design, although it seems impossible for the spectator from the lower level to see the fine rippling effect, already mentioned, before the waterfall begins. The coupled columned arcade is an interesting feature, and the view from the upper terrace would undoubtedly be very fine, where a central group is happily placed, backed by the central arch.

"Panama": The fountain portion of the design, though somewhat confused by the number and variety of the figures, seems to me a more monumental fountain in the strict sense of the term, and the cascade by which the water is brought on to the scene is kept more in the background. It appears to me that in execution the number of parallel staircases would be very confusing. There are no less than eight starting from the same level. In the section, with its romantic background, there is shown a large group of statuary as a central feature, but this is apparently omitted on the elevation. The back screen is a pleasant feature, and like the design by "Dolphin," and the following design by "Joy," a monumental fountain in the depths of the mountains seems to me somewhat wrongly placed.

In "Joy's" design the first thing that strikes one is that the architectural treatment of the great archway at the back, through which the torrent descends, is hardly Palladian in style. There is a certain grandeur about the whole conception, but I cannot help thinking that this mountain torrent could hardly flow away so placidly like the Serpentine under its little white stone bridge after its tremendous adventures in reaching its lowest level.

In the design marked "Cascade," I think the placing of the fountain, apparently in the centre of a great space in a town, is more correct, if not so ambitious in its conception. The design appears



THE SOANE MEDALLION 1914 : FROM MR. H. CHALTON BARNARD'S DESIGN FOR AN OFFICIAL COUNTRY RESIDENCE FOR A ROYAL PERSONAGE

to me to want a greater simplicity in treatment, especially as regards the shape of the fountain, and more repose in the sculpture. The general effect of the central feature is that of too many vertical lines, which make it too reedy in appearance. With a little more simplicity and repose in the working-out the design appears to me to have the elements of success as a monumental fountain.

In the design for a fountain by "32" we have a water-colour drawing of a marble fountain standing in a lake, which errs, perhaps, in the other direction by making the actual fountain too insignificant a feature.

The design sent in signed by "Red Dragon," with a Welsh legend which I dare not pronounce, shows an elaborate architectural colonnade in the centre of what appears to be a vast park. The whole plan is somewhat confused, and the Indian ink washes tend to make the work somewhat uninteresting.

But this is preferable to the elaborate and confused colour plan of "Merry and Bright," where the cast shadows and the general arrangement of colours have produced the effect of a design for a piece of barbaric jewellery rather than the plan of a monumental fountain.

THE GRISSELL GOLD MEDAL.

For the Grissell Prize we have three entries.

The prize, which has been awarded to Mr. Bennett ("Syrod"), seems to me thoroughly well deserved, and the simple dignity of the brick piers seems eminently suitable for a warehouse building. I will not attempt to criticise the steel-work details; the plan is, to my mind, the right one to adopt for a warehouse of this description, that is to say, the lift and staircase are entirely outside the rooms themselves, and not contained within the building as in the case of the plans by "Perey Vere" and "Composite." The only criticism I should venture on this design is that, under the requirements of the authorities, a staircase at each end would probably be required.

In the design by "Composite" I notice the staircase is composed of winders, which would not be allowed. The details are well drawn, but perhaps a little too much importance has been given to the cast shadows.

THE PUGIN STUDENTSHIP.

There are five sets of drawings sent in for the Pugin Prize this year, and the winner of the prize, Mr. Young, has certainly produced four strainers of remarkably interesting drawings. The tower of St. Mary Magdalene, Gedney, Lincolnshire, may be taken as a typical specimen, and the excellent plans which are given of every part show a very complete study of the building. The same remark applies to most of the work, and the direct and simple form of perspective of St. Edith's Church, Anwick, and Elm Church, Cambridge, seem most successful. His drawings of the glass from the Flodden Window, Middleton, Lancashire, and the pavement at Ely, show that his power of drawing detail in colour is quite up to the average.

Mr. J. R. Leathart, who has been awarded a certificate, has given us some exceedingly interesting drawings, but the effect of his strainers is spoilt by the vivid violet colour of his section and shadows. The drawing of the south-west transept of Ely must have been a considerable undertaking, and such a careful record as this should prove of great value.

It is difficult to describe all the excellent work in the drawings of the other competitors for this prize; it would take too long; but on the strainers sent in by Mr. Hamlin and Mr. Charlewood the perspective seems to be perhaps the weakest point. Taking it as a whole, the work generally sent in for the Pugin Scholarship this year seems quite up to the average.

THE MEASURED DRAWINGS SILVER MEDAL.

I am afraid the same cannot be said for the Silver Medal.

"Pax" (Mr. James Bennett) has sent in an interesting set of drawings of Brámante's Chapel at

Montorio, Rome. There seems a want of strength and decision in his drawing of the carved ornaments in his sheet of detail. The same defect also spoils his main elevation and section. The ceiling and pavement of the dome are drawn with enormous care, and are eminently satisfactory.

"Dauber" sends some drawings of a very interesting building on the Via Flaminia near Rome, and but for the washes of colour it would no doubt have received more sympathetic treatment at the hands of the judges. The same remark may apply to the style of drawings adopted by "Amussim," which are spoilt by the method of treating the backgrounds.

The building selected by "The Royal" is, to my mind, peculiarly unfortunate, and the student's attention should be directed to the proper rendering of sculpture on a building.

Both the Custom House, Dublin, and Fountains Abbey are excellent subjects, but in neither case have the students succeeded in producing a very interesting or fine set of drawings.

On the whole the work sent in for the Silver Medal this year is hardly up to the average.

THE ARTHUR CATES PRIZE.

There is only one entry for the Arthur Cates Prize, which has been awarded to Mr. John C. Rogers. Generally speaking his six strainers show excellent and careful work. The lantern of St. Paul's is a very remarkable section showing the construction, and is exceedingly interesting; also the drawing of the Fountain Court at Hampton Court is pleasing. The vaulting sections are clearly drawn. It is a pity that there are no other competitors for this prize, but I think it is safe to say that Mr. Rogers has produced six excellent strainers which would have won a prize in most years.

Speaking generally of the whole of the drawings submitted this year, it may be said that, although fewer in number, they are fairly up to the average. I should like to congratulate those who have received prizes and honourable mention, and to those who have not been successful, I wish better luck next time.

VOTE OF THANKS.

SIR THOMAS BROCK, K.C.B., R.A. [*Hon. A.*]: It is with the greatest pleasure that I propose a vote of thanks to the President and to Mr. Cave for the admirable discourses to which we have been privileged to listen this evening. There must, I feel sure, be in this Hall many who are better equipped than I am to perform this duty; but the request that I should perform it has, perhaps, been happily made in one respect at any rate—namely, that a few appreciative words spoken by one whose art has always been intimately associated with architecture, and has owed its greatest development to that association, may render your vote of thanks additionally acceptable, both to your President and Mr. Cave. In the early part of his Address, your President referred to the criticisms which have recently been levelled at modern architecture. I can sympathise with his and your feelings—what sculptor would not? For, as I need not remind you, a great deal of the sculptor's art is, like that of the architect, of a public character, and nearly every new piece erected comes in for almost as much criticism as one of Mr. Lloyd George's Budgets! But I think that artists, especially architects and sculptors, who, next to politicians, are perhaps subjected to a greater amount of public criticism than any other body of men, can draw some consolation from this reflection, that

no two critics ever thought alike, and consequently, having regard to the diversity of their opinions, too much importance need not be attached to any one of them. In saying this, I am reminded of the story of a novelist, who, wishing to learn what the professional critics thought about his novel, subscribed to a Press-cutting agency. He was told by one critic that his book was all right except in plot; by another that it was good except in dialogue; by a third that its one fault was a lack of construction; by a fourth that it was excellent except in its characterisation, and so on; with the result that the author wondered whether he had written the finest book that had ever been penned, or the worst one. Personally, I have always thought that if a man is to excel in any of the arts, his severest critic should be himself. It is perhaps not for one who has been out in the snow for so many years as I have to say what I am going to say, but I cannot refrain from expressing the opinion that the advice of a veteran—and I suppose every artist must be considered a veteran who has passed the age of fifty—that such advice, whatever success its giver may or may not have achieved in life, should, because it is based upon wide experience, always be carefully weighed by the younger men. But how much more reverently should such counsel be considered when it comes

from one who, like your President, has, in gaining so wide an experience, succeeded at the same time in attaining to the highest eminence in his profession. No student, I am sure, will leave this Hall without feeling himself indebted to your President and Mr. Cave for much valuable advice, help, and encouragement. And I am equally sure that every one will agree with me when I say that architecture is bound to flourish in this country, in spite of all the adverse criticisms that may be levelled against it, so long as it numbers among its leading exponents men who, like your President, are moved by the true artistic spirit, are ready to do, as he has done, so much towards promoting the welfare of their art, and are at all times prepared to speak in its behalf, as he does, with real conviction and courage.

MR. SOLOMON J. SOLOMON, R.A.: The pleasure with which I personally listened to the admirable Address of your President makes the task which has been allotted to me, if not easy, at least a congenial one—namely, that of seconding the vote which Sir Thomas Brock has proposed. There are few writers or speakers on such subjects as have been brought before us this evening who are more lucid or forceful than your President, Mr. Blomfield. I agree with Sir Thomas Brock that his advice to the student is most excellent—viz., not to take too seriously the opinions and criticisms that are expressed by the mere theorist. There is a school of literary men to-day who are having anything but a salutary influence on the arts, particularly among younger men. It is very gratifying for those members of the Academy who are present to-night to see the work of the students of the Academy Schools and to find that they have gained some of the highest awards. I should like to congratulate the students on the excellence of the work shown on the screen. Our President modestly disclaims having any share in the success of that school, but there is no doubt that he and his colleagues are to a large extent responsible for those successes. This audience, and the students of the Institute in particular, are fortunate in having prepared for them Addresses embodying the hard-earned experience of the acknowledged leaders of their profession; and I am sure you will agree that the Addresses to which we have listened this evening do not fall below the very high standard which obtains at these functions. The students are also very fortunate in having the reasoned criticisms of the kind given to them by Mr. Cave. I will ask you to accord this vote of thanks to our Chairman for his excellent Address, and to Mr. Cave for his excellent advice to the students.

The PRESIDENT, in response, said: On behalf of myself and my colleague, Mr. Cave, I thank

Sir Thomas Brock and Mr. Solomon sincerely for the very kind things they have said. And I should like to add my tribute to what they said about Mr. Cave. His criticism was most excellent, sound, and straightforward, just what our students look for, and what, I think, they want. And I should like, also, to thank Sir Thomas and Mr. Solomon and my colleagues for coming here to-night. The Institute always welcomes members of the Academy who are good enough to come and help us on occasions such as this, because we feel that the mere fact that they come shows that they are in full sympathy with what the Institute is doing to improve architecture in this country. Of course, the alliance between sculptors and architects is as old as the hills, as old as any building that ever has been. There never was a time when man did not build his hut and then try to decorate it by carving. And then, not long afterwards, came the painter, who would daub it with red and gamboge or other cheerful colour. Therefore, the alliance between the arts was really a primeval affair. In the course of history, especially in the course of modern history, things have got a little out of joint; yet that link of sympathy has never failed between architecture and sculpture, because it goes as a matter of course. There is the building, the salient point; and the architect wants to decorate it. He cannot do it himself, so he gets the sculptor to do it. But I feel that somehow, in recent times, owing to no fault of any of the arts, things have drifted apart, and the public have lost all sense of the great possibilities of the decorative art of the painter; and when I speak of decorative art I do not mean the painting of the decorator, but the decoration of the painter, which is a very different thing. During the last fifty years there has been plenty of painted decoration, most of it extremely bad. That is not the sort of work I have in my mind. With regard to the art of the painter, it seems to have been forgotten by our public that such men as Veronese or Tiepolo ever existed; or, not to put it at too heroic a level, Verrio and Laguerre, who did a great quantity of work in this country. A recent example has been brought to the front in the little house in Dean Street, Soho, where there is some charming decoration by one of our English painters of the early part of the eighteenth century. That seems to me to be the way English painting lies; we shall always want our portrait painters and landscape painters; but there seems to be here—and I speak now as an architect—real scope for the painting art in this country. The future of this art does not lie in the scrabbles of the futurist, but in fine decorative work done by men who know all that there is to be known about the figure and about painting.



WINDSOR CASTLE. VIEW FROM THE NORTH, SHOWING QUEEN ELIZABETH'S NEW TERRACE.
From Marcus Gerard's *Proceeding of the Sovereign and Knights Companions of the Order of the Garter at St. George's Feast in 1578.*

REVIEWS.

WINDSOR CASTLE.

"*Windsor Castle: An Architectural History.*" Collected and Written by Command of their Majesties Queen Victoria, King Edward VII., and King George V. By W. H. St. John Hope, Litt.D., D.C.L. Imp. 4o, in 2 vols. and a portfolio. Lond. 1913. Price £5 6s., £8 8s., and £10 10s., according to binding. ("Country Life," Tavistock Street, Covent Garden.)

It is strange that so important a building as the greatest of our royal palaces should have waited till now for an adequate history. But that reproach is now finally wiped out by the appearance of the important work which forms the subject of this review. With the approbation of Queen Victoria and her husband a beginning was made, more than fifty years ago, towards such a history in the collection of materials; but the death of the Prince Consort and other causes led to the scheme being dropped for many years, and it was not till shortly before the Queen's death that it was resumed and placed in the competent hands of Mr. St. John Hope for execution.

The Library of the R.I.B.A. is to be congratulated on entering into possession of a copy of the book,

which is the result of Mr. Hope's twelve years' labours, and of which it may safely be said that for the magnificence of its get-up and appearance and for the excellence of the text it is unsurpassed by any architectural monograph, either English or foreign. In view of the costliness of the production the price can hardly be a remunerative one; but, even so, it is such as to place the work, however indispensable it may be to the premier architectural Library of the Kingdom, beyond the resources of our Literature Standing Committee—as Chairman of that Committee I speak with knowledge—and we owe it to the generosity of the publishers of *Country Life*, by whose enterprise this work has seen the light, that we are able to place it upon our shelves. Type, paper, and binding are beyond praise and it would be an impertinence to commend the sound archaeology and clear writing for which the author's name is a guarantee, and to which every page testifies. The toil involved in the examination of hundreds of documents, ranging in date over eight centuries, and the minute examination, almost stone by stone and beam by beam, of one of the largest inhabited buildings in the world is stupendous, but without the author's antiquarian experience or his masterly

capacity for marshalling the vast army of facts, records, and traditions it would not have yielded the luxurious and convincing exposition of the subject contained in the six hundred pages before us. Nor can a grateful reference be omitted to the scrupulous fairness with which the artistic value of the work of different ages is estimated. If the products of May and Salvin are criticised with some severity it is because these are below the best standards of their respective periods, not because they are Caroline or Victorian in taste. Mr. Hope pushes moderation so far as to describe without comment the amazing features of the private chapel, though it is perhaps permissible to read a note of contempt between the lines of his bald statement of the facts.

The work falls into two sections corresponding to the two volumes. In the first, the history of the works done at the Castle is traced reign by reign, so far as it is ascertainable from the royal accounts and other documents, such as surveys, descriptions, and drawings, as well as from the buildings themselves. In the second, each portion of the Castle is described in turns as it now stands, with a summary of its antecedent history. By this double method continuity is secured for both the chronological and the local aspects of the subject. The accompanying portfolio contains a series of plans on stout parchment paper. Besides reproductions of the very interesting plans, or "plats," drawn by Hawthorn for Queen Elizabeth's additions in 1577, and John Norden's bird's-eye view of the Castle drawn for the Prince of Wales in 1607, it comprises six plans of the Castle—in 1790 and at the present day—to the scale of twenty feet to the inch, on which the works of various epochs are indicated in no less than seven different tints. These plans alone are of inappreciable value, and afford a most fascinating study. The volumes also contain a large number of varied illustrations, photographs of the exterior and interior of the palace and its chapels, and reproductions of drawings of different dates. Among these are a quaint drawing of 1450, from a manuscript at Eton, the earliest known representation of the Castle; drawings or engravings by Hoefnagel, Hollar, Wren, Batty Langley, Knyff and Mackenzie; and water colours by J. M. W. Turner and Paul Sandby—several of Sandby's views being reproduced in colour; while for the interiors we have drawings by Pyne. Very interesting, too, are the elevations prepared by Wyattville showing the palace before and after his alterations.

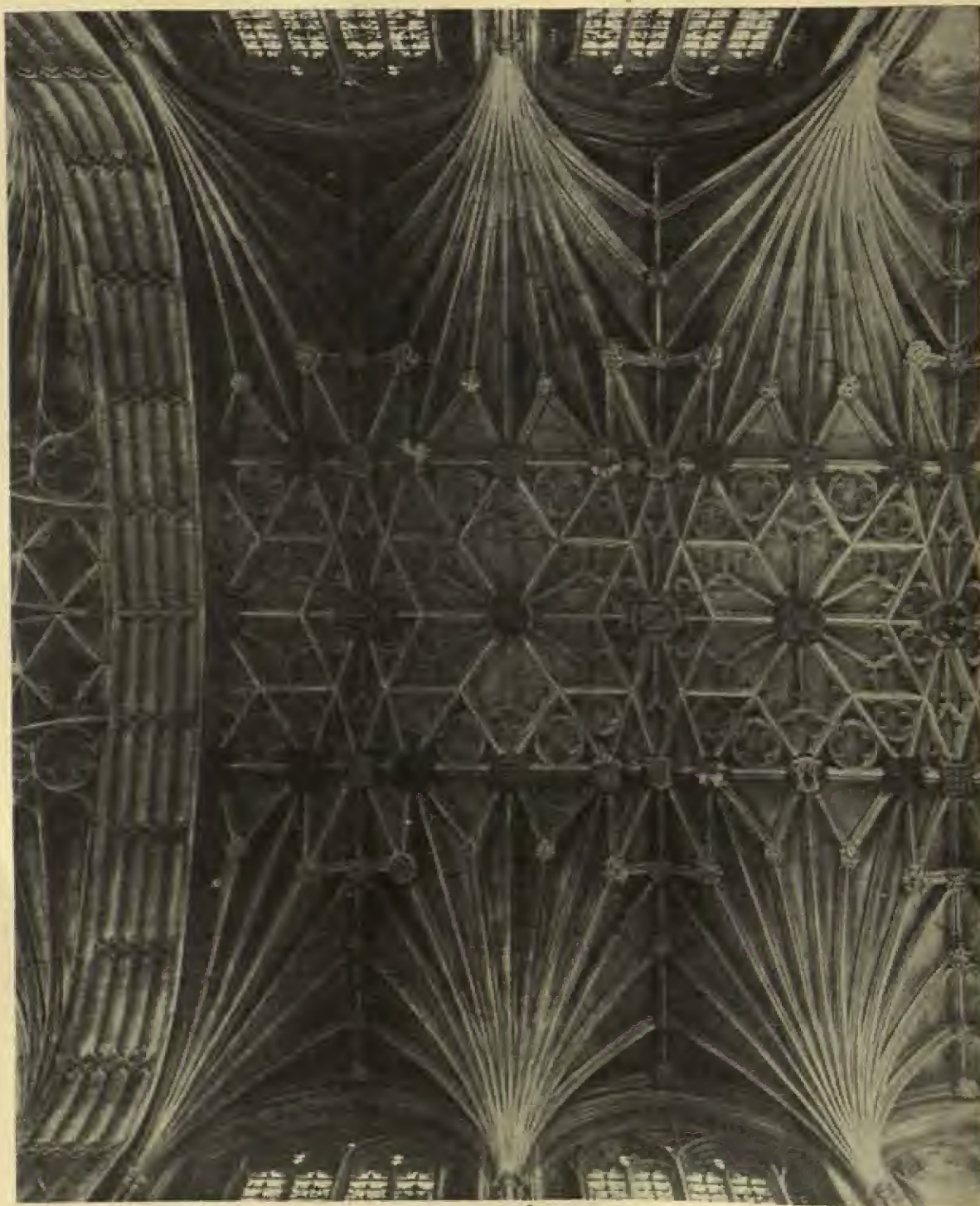
The Castle of Windsor has been a building since the Norman Conquest, and has doubtless not reached the end of its transformations. In the eight centuries of its growth it has reached a size rivalled by few royal residences, but it is a remarkable fact that the area enclosed by its buildings is not appreciably larger under George V. than under William I. Another striking point in connection with it is the comparative steadiness with which certain portions of this area

have been occupied by buildings serving approximately the same purpose since very early if not always the earliest times. Thus the outer and inner gateways and the great majority of the towers, including the donjon, stand where they were first planned. The Chapel of St. George, or rather its Lady Chapel, and the adjoining cloisters occupy the same position as the chapel and cloisters under Henry III. The State apartments are the lineal descendants of the King's Lodging which was built on the same site under Henry II., and the kitchen in which the meals of King George and Queen Mary are prepared not only stands on precisely the same spot as that in which the banquets of Henry Plantagenet and Eleanor of Aquitaine or of Edward III. and Philippa of Hainault were cooked, but it is still enclosed in walls which date from one or other of these reigns.

In the extent of the accommodation within the *enceinte* and in the height of the buildings, in their outward aspect and internal arrangement and decoration, the variations from century to century have been very considerable. Norman William would be puzzled to recognise his rude stockaded camp—for it can have been little more—in the imposing masses of masonry which heave themselves up against the skyline above the water meadows of Eton. The growth has, however, been by fits and starts, and long years of rest, and even neglect, have frequently intervened. The most important periods of building activity since the Conqueror's time fall in the reigns of Henry II., Henry III., Edward III., and Edward IV., in the three longer Tudor reigns and that of Charles II., and in the first half of the nineteenth century.

Though there is no direct evidence that William the Conqueror built a castle at Windsor, and probably no remains of such a building exist, a large group of indirect indications make it almost certain that he did. The steep chalk cliff which rises abruptly above the river opposite Eton forms the only eminence dominating the valley of the Thames between London and Wallingford. Its position is eminently suited for defence and for overawing the country around. It is therefore highly probable that it was selected by William as the site of one of those fortresses by means of which he kept the English in order, and more particularly of that ring of castles with which he surrounded London.

The nature of the site rendered it necessary to occupy the whole of the crest of the ridge, with the consequence that the enclosing walls of the present-day castle are, with one exception, practically on the same lines as the Norman palisade, most of whose original lay-out of Outer, Middle and Inner Baileys (or Lower, Middle and Upper Wards), each with its gatehouse, is still clearly to be traced. As at Arundel, built in 1070, the Upper and Lower Wards are nearly rectangular, and they are separated by the artificial pseudo-circular mound ("motte") formed on the



WINDSOR CASTLE. ST. GEORGE'S CHAPEL: VAULTING OF NAVE.



WINDSOR CASTLE. ST. GEORGE'S CHAPEL. IRON GRILLE OF EDWARD IV.'S TOMB.

highest point of the hill, and carrying a donjon of the same outline; while the Middle Bailey, being the space left over between them, is necessarily irregular in outline and is largely occupied by the ditch formed in the making of the mound. The one addition to the area of the Castle made since its foundation consists in the inclusion, in 1220-21, of a strip to the south of the mound, connecting the Upper and Lower Baileys on that side as well as on the north. The mound ditch originally connected with that round the east, south, and west sides of the whole enclosure, while a cross ditch separated the Lower and Middle Baileys; but the north walls of the Castle were sufficiently defended by the cliff on whose edge they stand. The defences between the Lower and Middle Wards appear to have been removed in the reign of Charles II.

It is not till the reign of Henry II. that there is documentary evidence through the Pipe Rolls of building at Windsor. It was then probably that the timber defences of the Castle, including those of the Keep, were, for the most part, replaced by masonry, the *enceinte* consisting of walls reinforced at intervals, and at the angles by square towers open on the inner side. There must have been residential buildings before this, but we know nothing of them. From this time onwards it becomes clear that the regular royal residence, *domus regis*, stood along the northern side of the Upper Bailey, and probably included lodgings for the Court officials, besides the hall, chapel, kitchen, and the private apartments of the Royal Family. These buildings, which were doubtless largely of timber, were roofed partly with shingles and partly with Cumberland lead. There is also evidence of a Great Hall in the Lower Bailey, situated opposite the entrance and near the north wall at a point between the latter and the north side of the much-later St. George's Chapel, where its foundations were exposed in 1895. This hall would be chiefly for the use of the garrison, whose accommodation would be in the neighbourhood. It was rather as a first-class fortress than as a palace that the Castle was regarded at this time, and in this capacity it was soon to suffer the only two attacks to which, in all its long history, it has been exposed. In 1193, when it was held for John by the Earl of Mortain, then in rebellion against his brother Richard, it was besieged for some weeks by the loyal barons, and on its surrender handed over to the Queen-Mother, Eleanor. Again in 1216, when John was King and the Castle was held for him by Engelard of Athie, it sustained a three months' siege by the revolted barons, who inflicted great damage by their siege engines but were unable to take it, though its western defences were still of timber.

John's son, Henry III., not only repaired the damage of the siege but completed the defences by replacing the remaining timber walls with stone (1227-30). The three round towers on the west, looking down over the High Street, are still among

the most striking features of the Castle. The north-west angle tower, formerly known as the Clewer Tower, and more recently as the Curfew Tower,* is particularly imposing owing to the drop of the ground.

Henry III. also, besides enlarging the King's Lodging in the Upper Bailey, practically rebuilt the Great Hall in the Lower Bailey, and built himself a secondary lodging and chapel near it. This new palace occupied the site of the present Canons' residences, and the chapel that of the Albert Memorial Chapel, while the cloister which joined them and formed the King's herb garden is still in existence, though largely rebuilt.

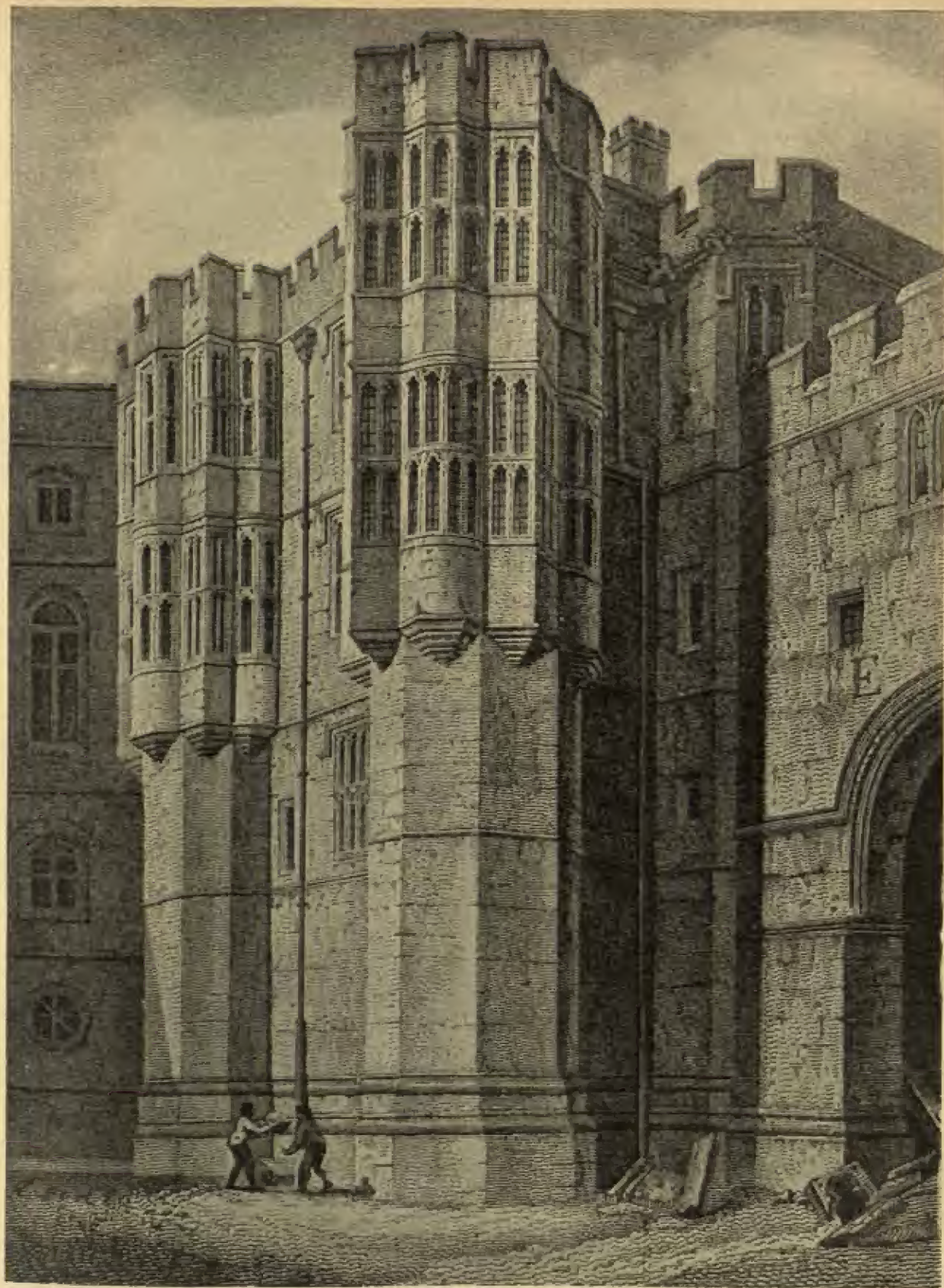
Edward III. restored and beautified his great-grandfather's chapel for his Order of the Garter, founded in 1348, and replaced the adjoining Royal Lodging, which had been burnt down, by residences for the Warden and Canons. He also rebuilt the Royal Lodging in the Upper Bailey in stone, and added lodgings for his suite along the eastern and southern walls of the court. His architect was William of Wykeham, a clerk of humble origin, whose ability won him rapid promotion and who earned undying fame as the founder of Winchester and New Colleges.

To Edward IV. is due the foundation of the magnificent Chapel of St. George—a sort of counterblast to his unhappy predecessor's building at Eton—and the picturesque brick and timber court known as the Horseshoe Cloister, for the accommodation of the Vicars. Henry VII. completed the chapel and rebuilt the old chapel behind it as a Lady Chapel and to contain the tomb of Henry VI., a project which fell through at his own death. He also erected at the north-west angle of the Royal Lodging a picturesque block with elaborate oriels, part of which is still standing.

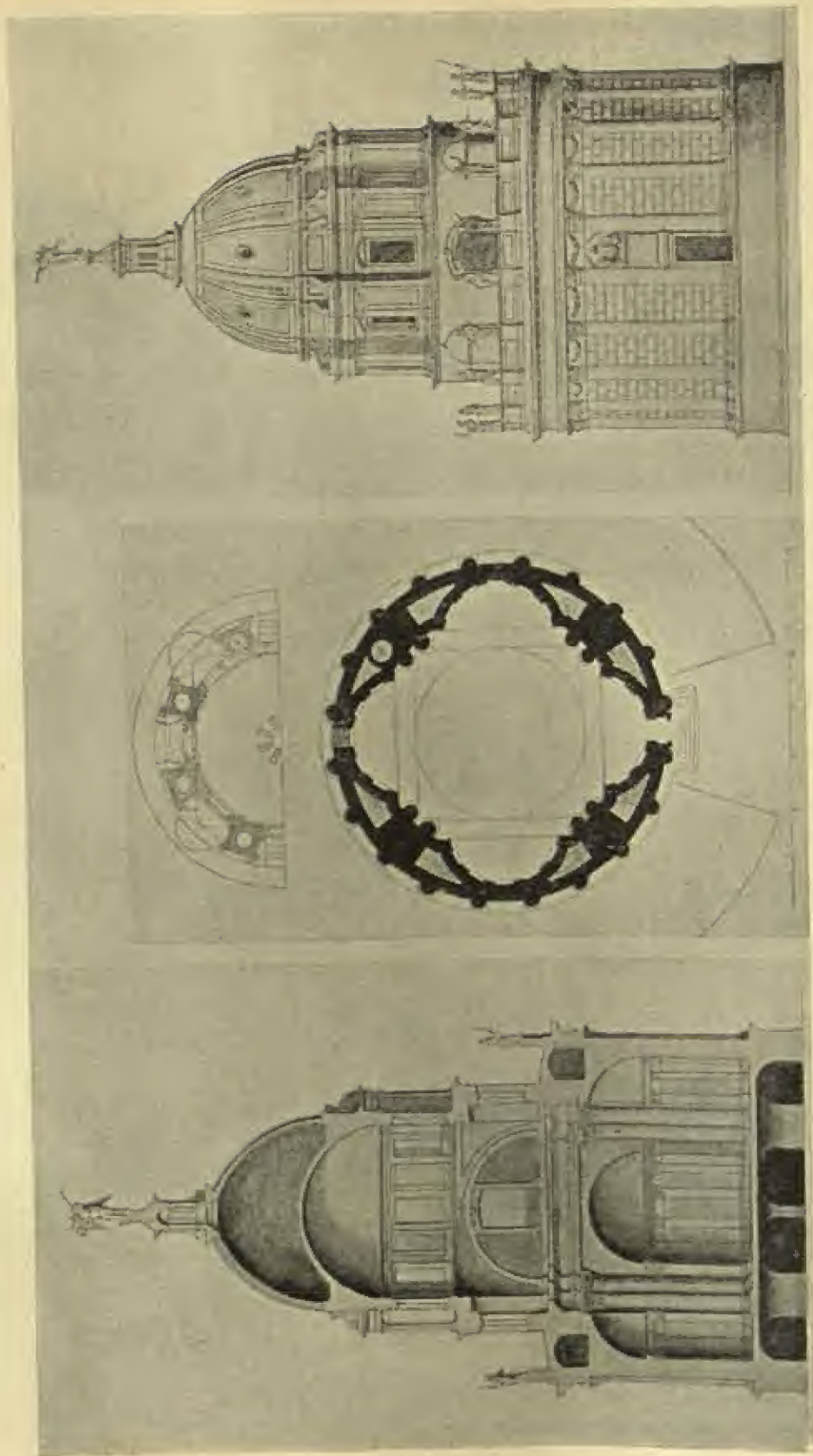
In the next reign Wolsey obtained permission to turn the Lady Chapel into his own mausoleum, but his tomb, begun by Benedetto da Rovezzano and Giovanni da Maiano, was confiscated by his royal master, and after many vicissitudes a portion of it was incorporated in Nelson's tomb at St. Paul's. Henry VIII. rebuilt the Lower Gatehouse, which still bears his name.

Edward VI.'s and Mary's contribution was a conduit with an elaborate lead and stone head in the Upper Bailey, rich with heraldic beasts and scutcheons and a spouting dragon all gay with colours and gilding. This was destroyed under Charles I. owing to its having fallen into hopeless disrepair. Elizabeth added a gallery in extension of Henry VII.'s building in the Upper Bailey, now forming part of the Library, with a

* It is stated on Plate IX that this tower was refaced in 1863, but the work then done can only have been on the inner face as stated on p. 525, for the present writer, who was born in 1865, distinctly remembers seeing the refacing of the outer faces in progress, probably somewhere in the 'eighties.



WINDSOR CASTLE. NORTH FRONT OF KING HENRY VII.'S TOWER, AS FORMERLY.
From a drawing by Mackenzie in Britton's "Architectural Antiquities of Great Britain."



WINDSOR CASTLE. SECTION, PLAN, AND ELEVATION OF SIR CHRISTOPHER WREN'S DESIGN FOR THE MAUSOLEUM OF KING CHARLES I.
 From the original drawings in the Library of All Souls' College, Oxford.

range of oriels from which she might watch the tennis play in a court to be formed on the terrace below. She also built permanent bridges instead of the drawbridges at the entrances. One of these at the "Rubbish Gate," to the south-west of the Upper Bailey, has recently come to light after being long earthed over.

The one building of the Commonwealth, an interesting specimen of the Classical architecture of the time, which was erected against the west wall of the Lower Bailey in 1657 by Sir Francis Crane for the additional accommodation of the Poor Knights endowed by Mary, was unfortunately pulled down

Gibbons and Phillips, with gilding by Coussin, and painted ceilings by Verrio. Contemporary drawings and descriptions, as well as the few remaining specimens of the work of these masters, show that Charles II.'s apartments were of great magnificence and, though less extensive, quite worthy to rank with those of Louis XIV. at Versailles.

May's successor at Windsor was Sir Christopher Wren, who, however, never had an opportunity of carrying out any work of importance there. Neither his design for a circular-domed chapel on the site of Wolsey's, to form a mausoleum for Charles I., nor his scheme drawn up for William III. to remodel the



WINDSOR CASTLE. WATERLOO CHAMBER: WEST END. WOOD CARVING BY GRINLING GIBBONS AND PHILLIPS.

by Salvin to make room for some intensely dull barracks of his own design.

The Restoration wrought great changes in the Castle. Hitherto practically all the windows looked on to the courts, and it was at this period that the outer walls were for the first time pierced with numerous lights. A large part of the Royal Lodging was also rebuilt by the Controller, Sir Hugh May, in an insipid and tasteless style of compromise between the Gothic of the earlier buildings and the newer Classical mode, but totally devoid of the merits of either. If, however, the architect was incompetent, the decorators were men of great capability. The suites occupied by the King and Queen, including the Royal Chapel, rebuilt by Elizabeth in its old position to the west of the hall, were wainscoted and elaborately decorated with carvings by Grinling

Upper Bailey with a new main entrance axial with Charles II.'s Long Walk, having come to fruition.

The Castle was neglected through the greater part of the eighteenth century, but in its last years a few alterations in the then fashionable Gothic manner were made by James Wyatt. It was not, however, till George IV.'s accession that the works to which it owes so much of its present appearance were undertaken. It was then that Sir Jeffrey Wyattville (nephew of James Wyatt), who had already carried out certain minor works, was empowered by Parliament to carry out an extensive scheme of alterations designed to transform a rambling and somewhat dilapidated congeries of semi-medieval buildings into a commodious modern residence worthy of the monarch.

Wyatville has been severely, and in many cases

justly, taken to task for his destructive vandalism and for his ignorance of the style in which he worked. It is certainly to be deplored that he destroyed much, and sometimes without necessity, as in the case of the King's Chapel, which he threw into St. George's Hall, with unfortunate effect. But whatever may be thought of his detail, which is deplorable, and his features, which are unexhilarating, it cannot be charged as a crime that in Gothic knowledge he was not in advance of his age. It is impossible to deny him the merits of thinking on a grand scale, and no one who views the varied outlines and impressively grouped masses of the great Castle from the north or west, or who examines his plans, can fail to admit that he could think out a problem clearly and that he possessed a sense of picturesque values of no mean order. The convenient and stately arrangement of the entrance and approaches are due to him, and also the heightening the buildings of the Upper Ward, carrying with it the need for heightening the Keep as well, which has thus become a landmark for the whole countryside. By these means he created a scale in harmony with that of the natural features and sufficient to dominate the town. When the state of the Castle at his advent upon the scene is taken into consideration it becomes evident that with the materials he had to work upon the result he achieved is one of which he had no need to be ashamed. A comparison of the elevations of the Castle before and after his alterations is greatly to his advantage, though it is true that had Windsor escaped Sir Hugh May there would have been more to weep over in its fate at the hands of Wyatville.

On the many fittings and other works of art in the Castle, about which Mr. St. John Hope gives much valuable information, it is impossible to dwell in a review, but, as an example of those whose disappearance we have to deplore, reference may be made to the great alabaster reredos in the Chapel of St. Edward and St. George (the predecessor of the Albert Memorial Chapel) in 1367. It was made at a cost of £166 13s. 4d., and "needed eighty horses and ten carts with twenty men to bring it from Nottingham," the journey occupying twenty-seven days. Such references as this, together with copious quotations from contemporary accounts and surveys throughout the book, convey a mass of valuable information as to the conditions and manners of former ages, particularly in the matter of wages and prices of materials. As an instance of differences in mediæval and modern practice it may be mentioned that in the fifteenth century it was customary to whiten the walls of rooms and ochre the cornices and ceilings. Many ancient technical terms occur in Mr. Hope's text, which may still, for aught we know, be in current use within the walls of Burlington House, but those of us who are without that charmed circle may be grateful to him for an elucidation of their meaning in the admirable index which concludes his book; for we are probably not all of us aware that a "vertivel" is the

eye in which the crook of a gate works, that "estrich boards" are boards from Norway or other eastern regions, that a "clicket" is a latch lock, a "tresant" a passage, a "halpace" a platform or landing, that "talwood" is firewood, or that "baberies" are carvings under misericordes.

W. H. WARD [A.]

GARDEN CITIES.

The Garden City Movement up to Date. By Ewart G. Culpin, Secretary to the Garden Cities and Town Planning Association. 4to. Lond. 1913. Price 1s. net. [Garden Cities Association, 3 Gray's Inn Place, W.C.]

Glancing through this record of a great movement, it is difficult to realise that it is barely fifteen years since the appearance of Mr. Ebenezer Howard's epoch-making book, *To-morrow—a Peaceful Path to Real Reform*, and it was only towards the end of 1899 that the Garden Cities Association, which had been formed for the purpose of studying Mr. Howard's proposals and considering their practical application, started its propaganda urging the necessity for action along the lines advocated by him. Mr. Howard's book may be said to have completely revolutionised the system of land development in this country, and to it we owe the new science of town building which led to the passing of the Housing and Town Planning Act of 1909. A comparison of the bills of mortality of districts planned on the principles laid down by Mr. Howard with those where the unhappy people are herded together under the old degrading conditions shows the remarkable change brought about in the health of the people. In a diagram given by Mr. Culpin in the book under notice, we find the following figures of the death-rate: Hampstead Garden Suburb, 4.2 per thousand; Letchworth, 4.8; Bournville, 5.7; Port Sunlight, 8.1; Bournemouth, 12.35; Broomfield, 19.5; Ebbw Vale, 19.7; Manchester, 19.98; Liverpool, 20.3; Wigan, 20.9; Shadwell, 21.1; Merthyr Tydfil, 21.12; Oldham, 21.46; Bethnal Green (Brady Street), 25. A return recently made of correspondence dealt with by the Garden Cities Association shows that there is hardly a country in the civilised world—Mexico and the Balkan States appear to be the only exceptions—which has not applied for particulars about the Garden City movement in England.

Mr. Culpin touches upon the educative work which is being done by the Garden Cities Association. Lectures are being delivered everywhere; literature is lavishly distributed, and the Association's magazine, *Garden Cities and Town Planning*, is winning its way to the front as an important educative factor in civic improvement in this country. Scores of landowners consult the Association in regard to land which they are developing, and although the Garden City scheme may not be followed out in its entirety, there is the satisfaction of knowing that thousands of acres are being developed upon better lines than there was a probability of securing beforehand, and instead of the countryside being defaced by the abominations that

used to be perpetrated, decent, comfortable cottages are being erected at a reasonable rental, serving not only to house the people they are intended for, but providing an example for the whole neighbourhood.

There is much, however, to be done before the movement can be said to have entered into full recognition. Improved sanitation will lessen the evils of the old centres, and legislation will probably relieve some of the hardships of the poorest, but it does not seem feasible under present conditions to house the lowest-paid workers in decent houses at a price which they can afford to pay. Legislative changes are hinted at which will cheapen the cost of providing houses for the poorer classes, and town planning will probably result in the establishment of many more settlements on the lines of our Garden Suburbs; but most people who know Letchworth will agree with Mr. Culpin that greater good would come to a greater number of people if there were only available funds to establish new Garden Cities, where the worker can live and carry on his work away from the crowded centres, and yet have all the advantages of the town in common with the delights of the country.

On the continent of Europe, Germany has made by far the most substantial progress in this movement, thanks to the devoted enthusiasm of the cousins Kampffmeyer and of Adolf Otto, who between them have borne the chief burden of the organisation; and Mr. Culpin adds a word as to the excellent housing work of the firm of Krupp's for the benefit of their workpeople. Some 40,000 people, all the families of Krupp's employees, are housed in the fourteen village settlements provided for them at rents much below those charged in the district, and in surroundings superior to anything provided elsewhere in Germany. One of the most attractive of the villages is Altenhof, designed for the old people who are pensioners of the firm. There are 600 inhabitants, who live rent free and receive a pension of from £3 to £4 a month.

Mr. Culpin's book, which runs into 88 quarto pages, with 40 well-drawn plans and numerous photographic illustrations, will be found of the greatest value to all who are interested in the Garden City and Town Planning movement, and especially to those entrusted with the task of laying out building estates. Mention should be made of the useful series of diagrams (p. 68) prepared by Mr. Clapham Lander to demonstrate some of the principles of town planning in garden cities and suburbs; and of the remarkable example of town planning on a hillside (p. 70) by Messrs. Raymond Unwin and George Bell. The various schemes in Great Britain are described in alphabetical order, together with the societies connected with Co-partnership Tenants Limited, Rural Co-partnership and Co-operative Housing. Inset between pages 8 and 9 is a valuable table summarising statistics as to area, population, capital authorised, limited dividend rates, &c. Details are also given of the various schemes at present in operation on the continent of Europe.



9 CONDUIT STREET, LONDON, W., 14 Feb. 1914.

CHRONICLE.

R.I.B.A. Prizes and Studentships 1913-14: The Prize-Winners and their Schools.

The Annual Exhibition of Designs and Drawings submitted for the R.I.B.A. Prizes and Studentships was held at the Institute Galleries, 9 Conduit Street, and was open to the public from Tuesday, 27th January, to Monday, 9th February, inclusive. According to the visitors' book some 1,300 persons visited the Exhibition.

The Presentation of Prizes took place last Monday in the presence of a numerous assembly of members and students and their friends. As special guests of the Council there were present: Sir Thomas Brock, K.C.B., R.A. [*Hon. A.*], Mr. George Clausen, R.A., Mr. Frank Dicksee, R.A. [*Hon. A.*], Mr. James J. Shannon, R.A. [*Hon. A.*], Mr. Solomon J. Solomon, R.A. [*Hon. A.*], Mr. W. R. Colton, A.R.A., Mr. F. W. Pomeroy, A.R.A. [*Hon. A.*], Mr. Walter Lamb, the new Secretary of the Royal Academy of Arts, and Mr. Evelyn Shaw, Secretary of the Commissioners for the Exhibition of 1851.

The President, on rising to address the Students, had an enthusiastic reception, his Address and Mr. Walter Cave's review of the drawings, which followed, being both very warmly applauded. Following the precedent set last year, Mr. Cave's Criticism was illustrated by a series of lantern slides of the drawings under review, and the audience were enabled to follow with interest and appreciation the many happy points made by the critic.

The President, before presenting the prizes, said that although their congratulations were due to the prize-winners, he thought that the schools at which they had studied should also come in for a share of congratulation. Of course, the student himself was the principal contributor, but he undoubtedly owed something to the care and attention of those who were responsible for his training. He would, therefore, on this occasion, introduce an innovation, and read to the meeting the names of the winners of the prizes, and mention with them the schools at which they had been trained. First, Mr. Cyril Farey, who was awarded the Soane Medallion, was a student at the Royal Academy School. In the same competi-

tion Mr. Bradshaw, who was awarded a Certificate of Honourable Mention and ten guineas, was a student at the School of Architecture of the University of Liverpool. For the Tite Prize the successful competitor was Mr. T. Lovering Wills, who was a student at the Royal Academy School, and prior to this had attended the School of Architecture of the University of Liverpool. Mr. Shoosmith, awarded a Certificate of Honourable Mention and ten guineas in the Tite Competition, was a student at the Royal Academy School. Mr. Friskin, the Ashpitel Prize-man, was a student at the Glasgow School of Architecture. Mr. Paterson, the Pugin Student, was a student at the Edinburgh College of Art; and Mr. Bennett, the Grissell Medallist, was a student at the Birmingham Municipal School of Art. It would be seen, continued the President, that the prizes had been fairly well distributed over the country, but it was a legitimate matter for congratulation, both to the Institute and the Royal Academy, that the Royal Academy School had carried off the honours this year. The students of that school had taken three prizes, which was not only a great credit to them, but also reflected credit on the very devoted Master of the Architectural School, Mr. de Gruchy, and—he said it with diffidence, as he was one of them—on the Visitors of that school.

Earlier in the evening it was announced from the Chair that the Council proposed to submit to the King the name of Jean Louis Pascal, Member of the Institute of France, and Commander of the Legion of Honour, as a fit recipient of the Royal Gold Medal for the current year, in recognition of his distinguished work as an architect.

Mr. Reginald Blomfield elected R.A.

At a general assembly of Academicians and Associates of the Royal Academy, held last Wednesday, Mr. Reginald Blomfield, President R.I.B.A., was elected a Royal Academician.

Representative Exhibition of British Architecture at Paris, May 1914.

A Joint Committee of members of the Royal Institute and of the Architectural Association has been formed to get together a collection of drawings, &c., representative of British architecture, together with students' drawings, for exhibition in Paris early in the month of May next. The proposal to hold the exhibition emanates from the Société des Architectes diplômés, of Paris, to whose good offices, it will be remembered, the profession in England were indebted for the most interesting exhibition of drawings by students of the Ecole des Beaux-Arts held by the Architectural Association at the Tufton Street Galleries last year. The exhibition now to be held in Paris was originally intended to be composed mainly of English students' drawings, but it was ultimately resolved to include a representative collection of British architectural work, and for this reason the

Société des Architectes diplômés have invited the co-operation of the R.I.B.A.

The exhibition will comprise three main sections—(1) Historical; (2) Modern Work; (3) Students' Work. Scottish and Irish exhibits will be grouped separately to show their historical and modern development. Modern work of a representative character will be shown limited to buildings actually carried out.

It is understood that the exhibition will be officially opened by the President of the French Republic.

The Chairman of the Joint Committee is Mr. Reginald Blomfield, R.A., President R.I.B.A., and the Hon. Secretary, Mr. P. Cart de Lafontaine [A.].

The British School at Rome.

The following Memorandum on the Course of Study for Architectural Students has been issued by the authority of the Faculty of Architecture of the British School at Rome:—

The students of the School will, by the nature of the case, have already passed through a fairly advanced course of training in architecture, and it will not be necessary to include in the course the technical studies necessary to the equipment of junior students. The object of the School of Rome should be to develop the systematic study of architecture in its widest sense; that is, as an art of great planning and fine construction, an art, not merely of detail, but of organic design. Although, therefore, the student must make careful studies of details, he should in doing so keep it constantly in mind that these details are only parts of a whole, whether it be of plan or construction, and that the object of his study of details is to enable him to get a complete and accurate grasp of that whole. Students of classical detail in the sixteenth century were content to fill their portfolios with beautifully drawn details of caps and columns and friezes. The modern student must take a wider and more intelligent view, he must think of these things in their proper relationship to great architectural conceptions, and fill his mind with the latter.

THE FIRST STEP.

A student who goes to Italy for the first time will probably feel rather bewildered at the enormous choice of subjects before him. He can hardly turn round a corner in Rome without finding something that he would like to draw and measure; but his time is limited, and it is important that he should not waste it on inferior subjects. He might well spend his first two or three weeks in looking round before settling down to any specific work, and he should look round, not at random, but under some guidance. The Director of the School anticipates the preparation of a brief "Guide to Italy for Students," with dated lists of monuments, grouped by towns, and it is possible that courses of lantern lectures may be arranged in the School. The student is strongly urged to avail himself of these whenever possible, and to consult the Director as to suitable monuments and as to the desirability of studying specific monuments that he may have selected by himself. The wide experience and knowledge of the Director and the Assistant-Director will be at the disposal of students, who should on no account neglect to avail themselves of these advantages.

STUDENTS' READING.

In addition to this, the student should supplement the information so acquired by his own reading. The time may be found in the autumn and winter evenings for Courses of Historical Study on the Art of Rome and so much of its general history as is necessary to understand that art in relation to the life of Imperial Rome. Students of special aptitude for research may here and there carry their reading further, with a view to qualifying for the authoritative treatment of Roman art by a trained artist. There is room for such work; but this is not the object of the School of Architecture, and the students, as a rule, will not be able to do more than read with a view to understanding the historical meaning and position of the works of art that they study, rather than with any idea of exhausting the subject. The student should consult the Director as to this reading.

CHOICE OF SUBJECT OF STUDY.

After acquainting himself with the range of subjects, the student will have to make his selection, and in order not to waste time and effort, he will do well to ascertain whether his subject has been studied before, and whether it has been adequately dealt with. As a matter of fact, probably most of the subjects worth studying have already been drawn and measured, but this should stimulate the student, if he can, to correct and supplement the work of his predecessor. If fresh and important discoveries are made, the student may make it his business to make a careful study of these in detail, proceeding on the material collected to make his restoration. It is of vital importance that in all "restorations" the most careful and exact measurements of the *stat actual* should first be taken. This habit of exact survey is a valuable training in itself. Students sometimes shirk the labour of careful plotting and measurement, and prefer the sketch of some picturesque detail, however inaccurate, provided the effect is brilliant. This is a disastrous habit of mind, and leads to loose thought and careless and slipshod design. The student in the Faculty of Architecture should recollect that he is to be an architect, that it is his business to get to the root of the matter, and that when he sacrifices accuracy to brilliant effects of draughtsmanship he is usurping the function of the painter. The architectural student must work systematically and consecutively if he is to get real benefit from the study of old buildings. In this sense he must work with the rigorous method of the scholar and the man of science.

THE RANGE OF SUBJECTS.

The question will at once arise, What kind of buildings should the student select? Should he limit his choice to the buildings of Imperial Rome? Should he include the buildings of the Renaissance? Should he even go further afield and take in Gothic and Romanesque? All these are worth studying, but not all equally so under the specific condition of studentship at the School at Rome. The object of that School is to train architectural students to be really accomplished architects, men of high attainment, thoroughly grounded in all that makes the art. Any one of the subjects mentioned is so wide in its range that it would be impossible in the two or three years of studentship to master very much more than their rudiments, should they all be attempted. It will be necessary, therefore, for the purposes of training to make a definite selection. In view of the fact that Rome has for centuries

been the centre of study of classic architecture (of course to be reinforced by study in Sicily, Greece, and, if possible, Asia Minor), and that the Renaissance is a modern version of Roman architecture given by some of the greatest artists in the world, it will be best to limit our selection to the classical architecture as defined above, and as further interpreted by the great architects of the Renaissance. The study of such great architectural conceptions as the Pantheon, the Colosseum, and the Baths of Caracalla, will be of first-rate educational value to the modern student. Scarcely less so will be the study of the great monuments of the Renaissance, St. Peter's and its Colonnade, the Farnese Palace, the Massimi, and many other admirable examples of what men of genius can do with the terminology of the past in expressing their own ideas.

This, however, will by no means exhaust the work that the student has to do. He must also improve himself in the power of design, and the time-honoured method of doing this will be the reconstruction of some ancient building on ascertained data; properly worked-out this will give ample scope for his abilities both as a designer and draughtsman.

RESTORATIONS.

The necessity of conscientious accuracy in the survey of the monument as it is, I have already pointed out. The survey will provide his essential data to be supplemented by all such information as can be obtained from published writings as to the purpose of the building, and out of these data he may build up a reconstruction of the entire monument as it originally existed, supplying by reasoned consideration of the existing data all that is now missing, and presenting the whole with careful regard to accuracy in its historical environment.

In regard to the latter point and to all archaeological points lying outside the technical details which the student's own knowledge should enable him to understand, he should avail himself of the expert advice of the authorities in the School of Archaeology. It will probably be desirable that the student should devote his first year to studies in Rome, his second and third to travels for stated periods and objects, and to the working out of the designs which the student will be expected to make during his studentship and to bring back with him on its completion. In regard to architecture, then, I take it the student on his arrival at the School will look about and consult with the Directors as to the work he should study, whether ancient or relatively modern, and will devote himself at first to the improvement of his technique, supplemented by systematic reading, including some study of Italian, and from that he will proceed to further study, to travelling, and to the preparation of these finished designs and drawings which will be the visible results of his studentship; but throughout his course the student should avail himself to the full of opportunities of getting into touch with painters and sculptors, learning what he can of their respective arts, endeavouring to grasp their point of view, their aims and ideas, mastering so much of their technique as will enable him later to work in intelligent sympathy with the sister arts. It is one of the special privileges of the School at Rome that the three arts can meet here on common ground, and it is a privilege that should on no account be neglected. The architectural student should take his part in studying from the life as the foundation of fine draughtsmanship, and should acquaint himself with the rudiments at any rate of modelling.

RELATIONS WITH PAINTER AND SCULPTOR STUDENTS.

I need not dwell on the charm of this comradeship with other artists. Students in the old Academy Schools retain pleasant memories of their association with painters, sculptors and architects, and of the place where, perhaps, they got their first glimpse of the actual meaning and mechanic of the work of artists. The students of the School of Rome will have far greater opportunities, opportunities that may be even too easy if you compare them with those of the far-distant days when the first batch of students of the French School at Rome took six weeks on the journey, doing the best they could on the modest pittance doled out by Colbert. Out of these humble beginnings, and after many vicissitudes, including even temporary extinction, has grown the world-famous School of the Villa Medici. It will rest largely with the energy and enthusiasm of its students, whether our British School at Rome is to be a worthy rival of that school, and whether it will lay the foundations of a sound tradition of the arts in this country. For the ideal and ambition of the student should be nothing less than that. Each, as he returns after his training, should be in his way a centre of illumination; he should reinforce the ranks of that devoted minority who stand for high ideals in every branch of art.

Subjoined to this is (A) a Syllabus of Subjects, and (B) a List of the Studies which the Students will be called upon to complete during their term of studentship at the School of Rome.

REGINALD BLOMFIELD,

Chairman of the Faculty.

December 1913.

A. SYLLABUS OF SUBJECTS.

1. Study of old buildings. Each and every building selected should be studied thoroughly in its plan section, elevation and details, i.e. the student should take sufficient particulars and work with sufficient accuracy to enable him, if necessary, to reproduce the building. In regard to details it is important that these should be studied in close connection with their position and environment.
2. Sufficient study of historical and archaeological works to enable students to understand the history of their art and the right historical setting of the subjects they study. Students should attend the lectures and demonstrations in the School bearing on these subjects.
3. Study of Italian and French or German.
4. Drawing from the life—and rudimentary modelling.
5. The results of the student's studies to be put together in drawings showing the restoration of some important ancient building, of which parts only remain. These drawings should be based on the student's own measurements and research.

B. LIST OF STUDIES.

FIRST YEAR.

At the end of the first year each architectural student should send to the Faculty the following drawings, which, except for the studies from the life, should be on sheets of not less size than double elephant.

- 6 sheets of measured studies of architectural details from the antique.
- 4 sheets of measured details from Renaissance buildings in Italy.
- (N.B.—Among these drawings must be included plans and elevations of the buildings in which these details occur, to a smaller scale, but of a scale sufficient to indicate the position and purpose of the details.)
- 3 sheets of measured studies of colour decoration.
- 4 sheets of studies from the life.

SECOND YEAR.

At the end of the second year,*

- 6 sheets of studies of planning from the antique and from Italian gardens and towns, with explanatory sections and elevations where practicable.
- 4 sheets of a scheme for the restoration of an ancient building (Roman or Greek).
- 6 sheets of studies from the life.

* In the case of the *Jurris* students the programme of the third year is to be substituted for this.

THIRD YEAR.

At the end of the third year,

A complete set of drawings showing the restoration of some important Greek or Roman work (baths, or theatre, temple, forum, harbour, &c.). These drawings to be completely finished and to be accompanied by the student's survey, and studies of the details on which his restoration is based. The subject selected must be submitted to the Faculty for approval. Where the subject suggested is of insufficient architectural importance, the student may, subject to the consent of the Faculty, supplement his restoration by an original design. The size of paper and the number of drawings will be left to the student's discretion, but they must not be less than will show adequately the whole scheme of restoration. A report must accompany the drawings.

N.B.

The continuation of a scholarship for a second or third year will depend upon the work submitted being satisfactory to the Faculty.

The drawings mentioned above must not be published without the permission of the Faculty.

The syllabus and list of studies is intended to indicate a minimum course of study. In addition to this the Faculty will welcome drawings and studies undertaken by the student on his own initiative.

The British School at Rome Competitions.

The Faculties of Architecture, Sculpture, and Painting of the British School at Rome have held their respective meetings to judge the works submitted in the open examinations for the Rome scholarships in architecture, sculpture, and decorative painting which are offered annually by the Commissioners for the Exhibition of 1851. The following candidates have been selected to compete in the final competitions:—

Architecture.—Thomas Braddock, Edward Robinson Ferdinando Cole, Ernest Cormier, Philip Dalton Hepworth, Fred Jenkins, Walter M. Keese, D. St. Clair Macphail, Bernard Alexander Miller.

Sculpture.—Benjamin Hancocks, Charles Sergeant Jagger, Frederick John Wilcoxson, William Henry Wright.

Decorative Painting.—John Miles Bourne Benson, Gladys Dorothy Davison, Thomas Corrie Derriek, Samuel Woods Hill.

The works of the competitors have been on view at the Imperial Institute, Upper Central Gallery, during the past week.

The Tribunal of Appeal.

The Council of the Royal Institute have re-appointed Mr. John Slater [F.] as Member of the Tribunal of Appeal under Section 175 of the London Building Act, 1894. The appointment is for a term of five years, as required by Section 176 of the Act.

The London Society: South Side Committee's Interim Report.

No. 2 of the *Journal of the London Society*, which is just issued, has among its interesting contents the Interim Report of the Society's South Side Committee (Mr. Paul Waterhouse [F.] Chairman). The Committee, who have sat eleven times since 25th February, 1913, outline the scope of their duties as being: (a) The consideration of certain proposals already made for the development of and approach to London south of the Thames; (b) The collection of facts bearing upon such schemes or upon any other and better schemes; (c) The presentation of certain conclusions either in the form of a comparison of the merits of rival propositions, or by way of a recommendation of some line or lines of future action. The Committee have kept before them the Report of the Royal Commission on London Traffic (1905), and the successive Reports of the Traffic Branch of the Board of Trade. They have also taken cognisance of the projects of local authorities and landowners as far as these are publicly ascertainable. In the collection of facts and data they have proceeded partly by direct inquiry, partly by personal observation and survey, and partly also by informal interviews which have been in several cases granted by the public bodies specially interested in the ownership, development, or preservation of the properties and buildings likely to be affected. The Committee set forth their views so far under the following headings: (1) The River Frontage and Proposed Embankment; (2) The Cross-River Traffic and Bridges; (3) The Road Development of the South Side; (4) The Railway Problem.

As regards the River Frontage and Embankment, the practicability has been considered of reclaiming as land the mud-bank—covered with water only at high tide—which extends to an average width of 166 feet all along the convex shore from Lambeth to the Borough, and by careful inquiry in authoritative quarters the Committee have elicited the opinions: (a) That if this bank were reclaimed, there would be no reasonable fear of a consequent fresh formation of mud-bank outside the newly-formed shore line; (b) That such an advancement of the land frontage would, on the contrary, probably improve the flow and "scour" of the current.

The Committee consider it debatable whether encouragement should be given to the idea of supplying on the South side new and capacious sites for large public buildings; or whether an attempt should be made to continue the wharfage but to confine its area and extent by (a) leaving certain limited portions of the bank to its present uses; by (b) the formation of large land-surrounded docks; or by (c) leaving a sort of backwater stream between the present wharf frontages and the new embankment on the reclaimed land. As there seems to be no necessity for adopting the backwater or lagoon-dock system throughout the whole frontage of the river, the

Committee offer for consideration the proposal that from a point adjoining the new L.C.C. Hall to Southwark Bridge there should be a continuous embankment 100 feet wide so placed that (subject to maintaining a satisfactory curve, and subject also to the reservation of the 700 feet clear waterway which is understood to be the requirement of the Port of London Authority) it shall coincide on its river-side more or less with the low-water edge of the mud-bank. At points where the embankment so formed is most remote from the present wharf frontages, it might be possible by the introduction to a limited extent of the by-stream or lagoon-dock principle above mentioned to leave the present river-side properties in the enjoyment of their present frontages, altered only by an improvement of the water approach by the substitution of the lagoon for the mud-bank. Barges would enter these backwaters or lagoons by channels passing under the embankment. In other places, where the embankment comes close to the present wharf line, river-side warehouses might be built at intervals on wide arches over the roadway, being thus brought up to the river-side for commercial purposes without interfering with the traffic uses of the embankment roadway. It is estimated that the cost of the embankment construction (£80 to £100 per foot-run) would be far more than covered by the value of the reclaimed land.

As a compromise between the arrangements above described it is suggested that the lagoon-dock could extend from Waterloo Bridge to Blackfriars Bridge, that the land adjoining the new embankment (including reclaimed land) west of Waterloo Bridge should be dedicated to sites for important buildings, and that east of Blackfriars Bridge there should be warehouses with or without projecting blocks spanning the embankment. East of Southwark Bridge it is thought that the embankment could be reduced to 60 feet in width, thus bringing the warehouses nearer the river, and producing an effect like the Amsterdam quays.

On the subject of the cross-river traffic and the railway problem, the majority of the Committee favour the removal of Charing Cross Station to the South side, and the substitution for the present railway bridge of a well-designed road-bridge. As regards the level of the approaches to this bridge, some hold the view that it should be approached on the North from a level equal to that of the Strand, or even of St. Martin's Church, thus passing over the embankment on both sides, and maintaining on the Surrey side a level equal to that of Waterloo Station. Others favour a connection of both extremities of the bridge with the old embankment on the North side, and the new on the South. The Committee mention the recommendation of the Royal Commission on London Traffic relative to a bridge between Waterloo and Blackfriars, and suggest the possibility of a bridge connected with a new street running South from the Eastern horn of Aldwych.

As regards the new South Eastern Station, the site generally favoured is one adjoining Waterloo Station, as serving the West End more conveniently than any more eastward position. If placed at this point it would be conveniently fed by the new Charing Cross Bridge and Waterloo Bridge, which it is suggested should be widened.

In connection with their proposals, the Committee state that they have by no means lost sight of the importance of financial considerations. They have made actual calculations based upon available data, but have omitted them from the present report, feeling that it is their function not so much to guide the finance of the schemes of the future as to make helpful provision for the right outlaying of the large sums which, whatever courses are adopted, will inevitably be spent. The concern of the Society lies not in proving the necessity or the profit of such expenditure, but rather in indicating the method in which this absolutely certain investment of public or corporate funds can best be employed in the true interests of profit, decorum, and beauty.

Alma-Tadema Memorial.

A committee of the friends and of admirers of the art of the late Sir Lawrence Alma-Tadema, R.A., has been formed for the purpose of honouring his memory. The Royal Academy has undertaken to provide the inscribed slab to be placed on his grave in St. Paul's Cathedral, and it is suggested that in addition to this there should be a public memorial of some importance, which should take the form of a bust of the artist—possibly in combination with a design in sculpture embodying some reference to his art; the scale and character of this memorial would depend on the amount of the subscriptions received. It has also been proposed that, if funds permit, the carefully selected and remarkable Archaeological Library which Sir Lawrence formed in the course of a long life (including folios of personally compiled memoranda and photographs, and also drawings and studies by his own hand) should be purchased for presentation to some public institution. It is known that it would be in accordance with Sir Lawrence's wish that this Library should not be dispersed. The Chairman of the Committee is Sir Edward Poynter, P.R.A., and Mr. Frank Dicksee, R.A., is Hon. Secretary. Those wishing to contribute to the fund for carrying out this proposal are requested to signify their intention to the Hon. Secretary, at Burlington House.

The Admiralty Arch.

It is announced that the Phoenix Assurance Company have addressed a letter to the Westminster City Council and the Board of Works, agreeing to facilitate the proposed Mall improvement by selling such part of their land as is required for that purpose on favourable terms. The action of the company is designed to save the time and cost of obtaining Parliamentary sanction for the improvement scheme.

Should their offer be accepted, at least a portion of the land required will be available at once. The scheme has been embodied in a Parliamentary Bill.

Competition for London Council Schools.

The London County Council, in April last year, approved the principle of an open competition for obtaining designs for the erection of public elementary schools in Billingsgate Street, Greenwich, and Linda Street, Battersea, and the matter was referred to its Education Committee to submit recommendations with a view to the competition being held. The Committee have recommended that an open competition be held in accordance with the following conditions: (i.) Compliance with the statutory conditions and the general provisions of the London Building Act; (ii.) Mr. John W. Simpson, F.R.I.B.A., to be appointed assessor at a remuneration in accordance with the usual scale of charges; (iii.) Payment to the successful architect or architects in accordance with the Schedule of Charges sanctioned and published by the Royal Institute of British Architects, and the competition to be held generally in accordance with the R.I.B.A. Regulations; (iv.) A clerk of works, nominated by the successful architect or architects and approved by the Education Committee, to be appointed for each school, at a salary not exceeding £3 13s. 6d. a week. In the full conditions, since drawn up and now before the Council, is a clause inhibiting any member of the Council or employee of a member, or any officer or employee of the Council, from competing, or assisting a competitor, or acting as architect or joint architect for the work.

£125 Concrete Cottage Competition.

The proprietors of *Concrete and Constructional Engineering* invite competitive designs for suitable detached or semi-detached labourers' cottages. The primary material to be used in their construction is concrete, and solid concrete, reinforced concrete, concrete blocks, or hollow blocks, concrete partition slabs, or any other suitable form of concrete will be acceptable. The purpose of the competition is to obtain a design suitable for a detached or semi-detached labourer's cottage that can be erected at a prime cost to the owner of £125 when put up in a series of six in one of the Home counties on a site at least thirty miles from Charing Cross, the owner buying his materials and employing labour without the intervention of a third party. The competition is open to all persons residing in the British Empire, and the following premiums are offered: First prize, 100 guineas; second prize, 50 guineas; third prize, 25 guineas; fourth and fifth prizes, 10 guineas each. The Assessors appointed by the promoters are Mr. Max Clarke [F.], Professor Beresford Pite [F.], and Mr. Edwin O. Sachs. Designs must be delivered at the offices of Concrete Publications, Limited, North British and Mercantile Building, Waterloo Place, S.W., not later than noon, 15th May next.

A Concrete Village.

The Delaware, Lackawanna, and Western Coal Company, of Pennsylvania, U.S.A., have put up for their employees a model village, to be known as Concrete City, which forms an interesting example of a settlement of this kind. The houses are two-story structures, 50 by 25 feet, built of concrete, with flat roofs and dark green "trimmings." They are moulded in one piece. Floors, walls, roofs, stairways, even sinks and wash-basins, are said to be made of "poured" concrete. They are so constructed that, on occasion, the furniture may be all removed and the entire house thoroughly washed out with a hose. Each house contains seven rooms, and has stationary wash tubs, a buttery, and a good dry cellar. Wooden strips are embedded in the floors so that carpets may be tacked down. Below the French windows, opening outward, window boxes for flowers are set in the walls.

Archæological Research in Italy.

In the *Times* of the 10th inst. appears an interesting report by Dr. Thomas Ashby upon archæological research in Italy, in continuation of his report published in the *Times* of 26th and 27th December last.

Commendatore Boni's excavations on the Palatine, he says, are still being actively pursued, and continue to yield interesting (one might almost say astonishing) results. Work is still being carried on in and under the palace of the Flavian Emperors. It has been discovered that the cryptoporticus, which ran between this palace and the temple which is now, with great probability, identified as that of Apollo, was originally continued right on under the main façade of the palace on the north-west side and probably also on the north-east side (that looking towards the Arch of Titus); though here the construction of a garden terrace (no doubt by the Farnese in the eighteenth century) has produced considerable change. The machinery chambers of the lift have also been discovered.

It is, however, the remains of earlier periods that chiefly claim our attention. Dealing with them in a descending order, we find, first of all, the foundations of a building similar to the Flavian Palace, on the same orientation and at a very slightly lower level (especially in the throne room in the centre of the north-east side), which may be provisionally attributed to the period of Nero. We must assign to it also a large semi-circular foundation wall which has recently been brought to light under the *trichinium* on the south-west side, and has been conjectured to belong to the circular dining-room with a revolving dome, which formed, we are told, a conspicuous part of the Golden House of Nero. This foundation descends to a considerable depth, a fact which points to the raising of the level at one moment by some 30 feet or so. At this depth we find the remains of a splendid building, again on the same orientation, which (according to Dr. Esther van Deman) must itself be dated, from the character of the brickwork, to the period of Claudius or Nero; while a quarry mark upon a block of marble, out of which a beautiful cornice has been carved, gives us the name *Tiberii Claudii*, which would naturally refer either to Tiberius or to Claudius. To it belong rooms with very fine pavements in marble mosaic (*opus sectile*) and well-executed marble facing. The room containing the paintings with scenes from the *Iliad* belongs to it, and so does a large hall decorated with an elaborate series of fountains, first discovered in 1721-5, which forms the subject of several drawings at Eton and elsewhere, and of a rare series of engravings by Kirkall, as well as the two rooms with paintings called the *Bagni di Livia*, which were also found in

1721-5; and had, unlike the rest, always remained accessible. A number of marble pavements (including a specially fine one, which partly underlies the *nymphæum* on the north-west side of the *trichinium*) belonging to its upper floor have also been discovered some three or four feet under the pavement level of the Flavian Palace. An ancient staircase which has been discovered and cleared (it was filled up by Flavian foundations) will in future serve as the access to the lower rooms.

To the north-east of all these rooms runs a cryptoporticus, which seems to have come from the house of Livia, a building of an earlier period, being indeed probably the original house of Augustus and incorporating the house of Hortensius, which we knew that he bought—as Mr. O. L. Richmond has already pointed out. We may regard as contemporary with it the remains of the earlier house or houses under the state rooms at the north-east end of the Flavian Palace (the throne room and the two rooms which flank it on each side). They lie at different orientation from it; but whether what has been discovered is to be regarded as a part of one house or of two it is not yet possible to say with certainty. Under the room on the north-west (the so-called basilica) there are, besides the remains of an earlier cistern at an intermediate level, some extremely fine paintings which were seen in the early eighteenth century; under the throne room are remains of mosaic pavements at a higher level, probably belonging to an upper floor; while under the room to the south-east (the so-called *Lararium*) are similar pavements, below which are other small rooms. The walls are decorated with paintings of architectural designs, enclosing patterns of chequers, which also form the pavement of one of the rooms. In the lunette at each end of this room are two archaic griffins in stucco in high relief on a red ground.

Under the north-eastern portion of the great central peristyle of the Flavian Palace, on the other hand, there are no traces of any earlier buildings of the Imperial or late Republican epoch. Here the original soil of the hill is, as we saw last year, only a few feet below the surface; and prehistoric pottery and traces of primitive huts and infant burials have been found. There has also been discovered a chamber with a beehive roof, the sides of which are lined with stone; in the centre of it a shaft descends to a series of underground passages with cemented walls. Such passages have been found to penetrate the whole of the hill, and from the objects found in them seem to date from the fifth century A.C. onwards. Their object is as yet uncertain, and they are one of the strangest features of the present investigation.

Commendatore Boni's interesting identification of the beehive chamber with the *Mundus*, it will be remembered, was discussed in the *Times* Rome Correspondent's telegrams of 1st and 2nd January, and in Dr. Ashby's letter published in the *Times* of 8th January.

Another "Highest Office Tower."

Plans for an office building to be erected in New York City on the block bounded by Broadway, Eighth Avenue, 57th and 58th Streets, and claimed to be the highest building in the world, have been filed with the Bureau of Building, New York City (architect, Mr. Francis H. Kimball). The structure will have fifty-one stories, and will cost \$12,500,000. The building, which is for the Pan-American Association, a body which exists for the promotion of general business relations between all the countries of Greater America, is to take the form of a tower over its entire area, rising from curb level to the "observation story," a height of 894 feet, considerably more than a hundred feet above the Woolworth Building, its nearest competitor. In view of the increasing

popular demand in American cities for the regulation of building heights and areas, and of the New York Advisory Committee's suggestion that not more than one-fourth of the lot area should be built to an unlimited height, it seems likely that the Pan-American Building will embody the final development in the matter of height of the distinctively American office building.

Economy in Hospital Building.

The whole argument for efficient hospitals is well summed up in the remark of a German physician who, when conducting a foreign *confrère* through one of the Great Berlin municipal hospitals, was asked how the city could afford such magnificent institutions, equipped as they are with pathological laboratories, hydro- and physico-therapeutic apparatus, facilities for serving special diets, and for the most perfect sanitation that modern architecture can devise. "We cannot afford to be without them," was the reply. "We have to take into consideration the following points, if for no other reasons than those of actual economy: first, to get the patient well as soon as possible, so that the institution is not charged for his care any longer than necessary; secondly, to get him completely well, so that he may not return—at least for the same disease; thirdly, to have available such scientific methods for the study of the case as will enable us to better treat the next similar case."

The Lighting of Picture Galleries, &c.

Under the auspices of the Illuminating Engineering Society a discussion will take place on Tuesday, February 17th, at the House of the Royal Society of Arts, John Street, Adelphi, on "The Lighting of Picture Galleries and Art Studios." The debate will be opened by Professor Silvanus P. Thompson, D.Sc., F.R.S. It may be mentioned that some useful information on this subject may be gained from the Paper by Mr. S. Hurst Seager [F.], published in the JOURNAL R.I.B.A. of 23rd November, 1912.

The Mappin Galleries, Zoological Gardens

Messrs. D. G. Somerville & Co., Ltd., who have in hand the construction in reinforced concrete of the Mappin Galleries for the Zoological Society, write offering to conduct over the Galleries any members of the Institute who would be interested to see the work. Messrs. Belcher & Joass are the architects, and the buildings embody almost every form of construction, including valleys, retaining walls, tanks, columns, beams, floors, 45-foot span lattice girders, hills, &c. Members desiring to avail themselves of this offer are requested to send in their names to the Secretary R.I.B.A., not later than Monday, 23rd February.

Société Archéologique de France.

Count Plunkett [*Hon. A.*] writes with reference to the paragraph from the *Athenæum* printed under the

above heading in the last issue of the JOURNAL:—"I regret to see an ungracious reference to the Société Archéologique de France in our JOURNAL. Surely we should keep the Institute clear of the *jalousie de métier* which afflicts even otherwise respectable societies. The Société Archéologique publishes transactions, and fathers reputable works; and the only payment asked of Corresponding Members is a trifling fee for the *diplôme*. Many noteworthy people have accepted honours from the society."

OBITUARY.

John Honeyman, R.S.A., of Glasgow, whose death in his eighty-third year was recently announced, was a Fellow of the Institute from 1874 till 1901, when he retired from practice through total loss of eyesight and resigned his membership. He was for several years a member of the R.I.B.A. Council, and had filled the office of President of the Glasgow Institute and of its forerunner, the Glasgow Architectural Society. Mr. Honeyman was originally destined for the Church, but having strong artistic leanings he gave up his theological studies and entered the office of Alexander Munro, architect, as articled pupil. He started practice on his own account in Glasgow in 1854, and during the next few years visited many of the cathedral towns in England, devoting much time to measuring and making drawings of the buildings which interested him. In this way he acquired a knowledge of the Gothic style, and his after-work bears evidence of the extent and thoroughness of his studies. The greater part of his work consisted of church architecture, and almost every county in the south of Scotland contains examples of it. Among the principal may be mentioned St. Michael's Church, Merchiston; the United Free West Church, Greenock; the United Free West Church, Perth; and Lansdowne and St. Silas' Churches, Glasgow. He restored numerous old churches and did much to maintain them as cherished Scottish possessions. Among these are St. Michael's Church, Linlithgow, Brechin Cathedral, and Iona Cathedral. He acted for many years as architect of Glasgow Cathedral, and was the author of many authoritative papers respecting that building. He designed also a great many country mansions, standing out for special mention being Roundlewood, Crieff, and Auchamore House, Gigha, for the late Colonel Scarlett, and Skepness Castle. In 1889 he took into partnership Mr. John Keppie. In 1892 he was elected an Associate of the Royal Scottish Academy, and in 1896 an Academician. He was the author of numerous pamphlets on such social subjects as the housing and dwellings of the poor, open spaces in towns, and the incidence of taxation. He was one of the originators, and for two years President, of the Glasgow Archaeological Society, and was Vice-President of the Glasgow Art Club.

The death of Mr. Wm. Aumonier, the well-known and highly esteemed wood-carver and architectural sculptor, which occurred on the 21st ult., ought not to be allowed to pass without notice in this JOURNAL. His picturesque figure, with huge felt hat, long flowing locks, low turn-down collar and negligé necktie, was some years ago a very familiar one at the Institute meetings. In 1896 he read before the Institute a Paper on "Wood-carving and Wood-carvers" [JOURNAL, 6th Feb. 1896], afterwards taking his tools and giving on a roughly-improvised bench a remarkably vigorous demonstration of his method of working at his art. In 1902 he read another Paper on "Inlay and Marqueterie" [JOURNAL, 12th April 1902]. Mr. Aumonier was of Huguenot descent, and was born in 1839, the son of J. H. C. Aumonier, a distinguished craftsman in gold. He served his apprenticeship as a wood-carver to Messrs. Colman and Davis, of George Street, Portman Square; and at the age of nineteen went to Paris and worked in the studios of M. Cruchet, M. Kaltenhauser, M. Fourdinoir, and others. Later on he came under the notice of M. Duthoit, of Amiens, who engaged him to work on the restoration of the Cathedral at Amiens under the direction of M. Viollet-le-Duc. Returning to London he became associated with Alfred Stevens in the studios of Mr. Leonard Coleman. In 1876, encouraged by the late Mr. J. M. Brydon [F.], he started a studio of his own, and from that time took a prominent place in the field of architectural sculpture. He became a member of the Art Workers' Guild in 1885, and remained always very closely attached to that body. Among the principal buildings in which he carried out work (in later years in conjunction with his son) are the new Municipal Buildings, Art Gallery, Technical Schools, and Pump Room Extension, Bath (under Mr. Brydon); Victoria Law Courts, Birmingham (under Messrs. Aston Webb and Ingress Bell); the Oxford Municipal Buildings (under Mr. Henry T. Hare); Oriel College, Oxford (his last work), and other important works, under Mr. Basil Champneys; the Bishop's Throne, Sedilias, and Fald Stool in St. Paul's Cathedral (under Messrs. Bodley and Garner); Sunderland House for the Duke of Marlborough, Kingsgate Castle for Lord Avebury (under Messrs. Romaine-Walker and Besant); the United University Club, Pall Mall, Moundsmere, Lady Margaret Hall, &c. (under Mr. Reginald Blomfield, R.A.).

THE EXAMINATIONS.

The Final: Testimonies of Study.

The Board of Architectural Education announce that students preparing for the Final Examination will be at liberty to submit as Testimonies of Study designs made by them in any of the recognised Schools of Architecture in lieu of the alternative problems in design set by the Board.

ALLIED SOCIETIES.

Hampshire and Isle of Wight Association of Architects.

A meeting of this Association took place on January 21st at the Ashley Road, Boscombe, Branch of the Royal Victoria and West Hants Hospital, Alderman McCalmont Hill, D.C.L., presiding. The Chairman of the Hospital, Mr. Robson Burrows, expressed the pleasure felt by himself and his colleagues in the management that the Association should have selected that building for inspection and meeting. Referring to the accommodation for patients, which of course was the primary consideration in a hospital, Mr. Burrows expressed the opinion that hardly enough consideration was given to those who had to work it, either in an administrative way or as to the nursing staff. He had frequently noticed that it was not taken into consideration that if there were a certain number of patients to nurse there must be a certain nursing staff, and they must be put somewhere. The public were rather apt to think that the nursing and administrative staffs could be put up in any hole or corner, but it was hardly fair to expect them to have enthusiasm for their work if they were not adequately cared for in the way of comfort. It was as necessary for efficiency to think of those who had to carry on the hospital as it was to think of the patients themselves.

Mr. G. A. Bligh Livesay [F.], architect of the Hospital in conjunction with Mr. Keith D. Young [F.], then read a paper entitled: "A Provincial Hospital: its Design and Construction." The Boscombe Branch Hospital, Mr. Livesay said, was designed on the Pavilion system, the wards being on the south and connected with the main corridor which runs the entire length of the building. On the north are arranged the administrative rooms, the kitchens, isolation wards, and the proposed new operation theatre, and at both ends corridors branch off at right angles, giving access to the out-patients' department and the Gardiner Memorial separation wards. Mr. Livesay laid stress on the fact that in section all the wards are built on open arches so that the main floor is some six feet above the level of the ground, a form of construction which, though expensive, gives the undoubted advantages of raising the building to a purer stratum of fresh air, invites increased sunshine, and provides a continuous current of air underneath as well as around and over the wards. A special feature of the plan is the main ward balconies, for while sheltered by the ward ends, sanitary towers, and connecting passages, they are open to the south, thus forming veritable sun baths. The balcony beds are in great request, patients liking to sleep out in them even at night and in the winter. The paper gave details of construction and materials, and of the ventilation, lighting, and heating, and various illustrative drawings were exhibited.

After a brief discussion, Mr. Livesay conducted the party over the hospital buildings and explained various technical points he had brought out in his paper.

The Birmingham Architectural Association.

At a meeting of this Association held on February 6, a Paper was read by Mr. H. P. G. Maule [F.] on the subject of "Reason or Fashion in Architecture."

The lecturer pleaded for a more broad-minded conception of the possibilities of architecture, for buildings which stood true to the purposes for which they were erected and gave some distinct visual indication of the uses for which they were intended, instead of outwardly smothering up all traces of plan and construction in a dress copied from some architectural fashion-plate, as unfortunately is often the case to-day.

The lecturer was of opinion that with the exercise of a little more imagination it should be quite possible to erect a building, of whatever material, amply fulfilling modern requirements in every way and still being sound architecture.

That we were as yet unable to express ourselves architecturally in steel might be attributed to the possibility that steel construction was as yet in a transitional stage, and therefore we smothered it up in other materials with which we have for many ages been familiar in the same way that the first

motor-cars were made to resemble the horse-drawn vehicles and the first steel warships in the likeness of the sailing vessels of a former age.

It was pointed out that the human character of a nation in the past always showed itself outwardly in its architecture, and that the architecture of a period, past or present, must have some prototype in the national life; therefore, considering the rapid changes and far-reaching discoveries which have almost completely revolutionised the life of our nation during the last hundred years, it is little wonder that our architecture has been patchy and full of fickle changes of fashion and reason; and we must be thankful that England does still possess a sane domestic architecture (although of largely diversified styles), whatever may be said of other phases.

The old styles, national, local, and imported, are to us a glorious heritage, and as each age is, in the course of its evolution, in a large measure the outcome of what has gone before, therefore it would appear that it is in the right order of things that we of to-day should take from honest old styles and absorb to ourselves those features and modes of architectural expression which are applicable to modern conditions and requirements, without becoming mere copyists. Slavish copies of old work must be condemned as the height of foolishness, and the lecturer expressed the opinion that what was required of present-day architects was a greater power of imaginative conception—a condition of mind which, while accepting what was best from old work, could give to a building in all its features a clear indication of the spirit of the age, or produce something that was equally original and sound.

Architecture being a constructional art, certain extents and limits have come to be recognised as desirable, but such terms as "proportion," "symmetry," "balance," and "the grand manner" (beloved of certain schools) become almost empty phrases if it is attempted to give effect to their meanings in practice without the power of a critical imagination.

It was considered that the general development of plan form would result in sounder architectural qualities.

MINUTES. VII.

At the Seventh General Meeting (Ordinary) of the Session 1913-14, held Monday, 9th February, 1914, at 8.30 p.m.—Present: Mr. Reginald Blomfield, A.R.A., *President*, in the Chair; 33 Fellows (including 10 members of the Council), 38 Associates (including one member of the Council), 7 Licentiates, 6 Hon. Associates, and numerous Students and visitors—the Minutes of the Meeting held 26th January 1914, having been published in the *JOURNAL*, were taken as read and signed as correct.

The following Associates, attending for the first time since their election, were formally admitted by the President—viz., Francis Lorne, Harry Duncan Hendry, Claud Vincent Ponder, Joseph Hill.

The Secretary announced that the following candidates, being found by the Council eligible under the Charter and By-laws, had been nominated for election:—As ASSOCIATES (55): Laurence Kingston Adams, M.A., Warrington; Guy Maxwell Aylwin; John Allbut Baskerville, Manchester; Philip Dennis Bennett, *Grissell Gold Medallist* 1914, Birmingham; Harry Joseph Birnstingl; Charles Wilfrid Box; Joseph William Bull; John Oliver Cook, jun.; Robert Cromie, P.A.S.I.; Harold Crone; Leonard Arthur Culliford, P.A.S.I., Coventry; William Frederick Dawson, Leeds; Harold Alfred Dod, M.A., Liverpool; Ernest Sugden England, Oldham; Stanley Howe Fisher; George Herbert Foggitt, *Title Prizeman* 1911; William Wallace Friskin; Bernard Preston Gaymer, North Walsham; Harry Beckett Swift Gibbs, Sheffield; Henry Victor Godfrey; William Stanley Grice; Richard Howard Gutteridge; Carl Herbert Hartmann; William Hornby Hatchard-Smith; Charles Dearman Hawley; Albert Victor Heal; John Oliver Brook Hitch; Harry Dawber Holland; Wigan; Vernon Hugh Hughes; Frederick Richard Jelley; Herbert Jones; Walter Sydney Jones; Charles Stanley Kimpton; Arthur Bedford Knapp-Fisher; Henry Birkett

Leighton, Sheffield; Arnold Lowcock, Rotherham; Albert Edward Lowes, Newcastle-on-Tyne; Robert Norman Houghton Mackellar, Glasgow; Henry William Mann; Harold Ewart Matthews, Derby; Theodore Nelson Newham; William Paterson, Edinburgh; Herbert Cecil Powell, Melton, Marple Bridge; William Pritchard, P.A.S.I., Liverpool; Cecil Walter Rogers; Robert Tor Russell; William Arthur Rutter; Stanley Salisbury, Harpenden; Stephen James Bridges Stanton; Charles Edward Tebbs, Newport, Mon.; William Harding Thompson; Robert Albert Walter; Claude Cornelius Tom Warnes, Edinburgh; Frank Woodward; Laurence Muskett Yette, B.A. Cantab. As HON. ASSOCIATE: Edward Bullough, Fellow of Gonville and Caius College, Cambridge.

The Secretary further announced that Mr. Richard John Lovell, of Brownlow House, 50 and 51 High Holborn, had been reinstated as Associate of the Royal Institute.

The President announced that the Council proposed to submit to His Majesty the King the name of Monsieur Jean Louis Pascal, Member of the Institute of France, Commander of the Legion of Honour, as a fit recipient of the Royal Gold Medal for 1914.

The President delivered an ADDRESS TO STUDENTS, and Mr. Walter Cave [F.] read a CRITICISM (illustrated by lantern slides) OF THE DESIGNS AND DRAWINGS submitted for the Prizes and Studentships 1913-14.

The President went through the list of successful competitors, and having announced the names of the Schools of Architecture responsible for their training, congratulated the heads of such Schools on the successes of their students in the various competitions.

The Presentation of Prizes was then made by the President as follows:—

INSTITUTE MEDAL (ESSAYS) AND TWENTY-FIVE GUINEAS.

The Medal and cheque for £25 5s. to Mr. T. S. Attlee [A.].

Certificate of Hon. Mention and cheque for £5 5s. to

Mr. J. M. W. Halley [Licentiate].

Certificates of Hon. Mention to Mr. Martin Shaw Briggs [A.]

and Mr. Alexander R. C. Eaton.

INSTITUTE MEDAL (DRAWINGS) AND TEN GUINEAS.

The Medal and cheque for £10 10s. to Mr. James Bennett.

SOANE MEDALLION AND £100.

The Medallion to Mr. Cyril A. Farey.

Certificate of Hon. Mention and cheque for £10 10s. to

Mr. H. Chalton Bradshaw.

Certificates of Hon. Mention to Mr. Thomas Chalkley

and Mr. Gordon S. Keesing.

PUGIN STUDENTSHIP.

Mr. Wm. Cecil Young introduced as Pugin Student 1914.

Certificate of Hon. Mention to Mr. Julian R. Leathart.

TITE CERTIFICATE AND £30.

Certificate to Mr. Tremwith Wills as winner of the Prize.

Certificate of Hon. Mention and cheque for £10 10s. to Mr.

Arthur G. Shoosmith.

ARTHUR CATES PRIZE (FORTY GUINEAS).

Cheque for £42 to Mr. J. C. Rogers [A.].

GRISSELL GOLD MEDAL AND TEN GUINEAS.

The Medal and cheque for £10 10s. to Mr. Philip D. Bennett.

GODWIN BURSARY (£65).

Mr. Martin Shaw Briggs [A.] introduced as winner of the Prize.

ASHPITEL PRIZE.

Books to the value of £10 to Mr. Wm. Wallace Friskin.

PUGIN STUDENTSHIP 1913.

The Pugin Medal and cheque for £20 to Mr. Wm. Paterson.

GODWIN BURSARY 1911.

The Godwin Medal to Mr. C. C. Brewer [F.].

On the motion of Sir Thomas Brock, K.C.B., R.A. [Hon. A.], seconded by Mr. Solomon J. Solomon, R.A. [Hon. A.], a vote of thanks was passed by acclamation to the President and Mr. Cave for their Addresses.

The President having responded, the proceedings closed, and the meeting separated at 10 p.m.



From the late Mr. J. M. Whitelaw's Design for a Terminal Railway Station, awarded the Soane Medallion 1913.

LONDON RAILWAY STATIONS.

By PAUL WATERHOUSE [F.]

Read before the Royal Institute of British Architects, Monday, 23rd February 1914.

WE are to consider this evening the railway stations of London. There are, it seems, 299 of these within the metropolitan area. It is not, therefore, my intention to devote even a few minutes to each. I propose merely to offer some considerations relating solely or chiefly to the greater termini of which we have a dozen*: Euston, King's Cross, St. Pancras, Liverpool Street and its ally, Fenchurch Street, Charing Cross and its Cannon Street appendage, Victoria, London Bridge, Paddington, Marylebone and Waterloo.

The terminal stations of London are the points at which the greatest city of the earth's best country gives its welcome to the world at large. Perhaps, therefore, the first thought which arises in contemplating them is the question, "Do these welcomers give their greeting in terms worthy of the city that they represent?" It is a rule of hospitality that, at the threshold, we should show to coming and going guests a fervour at least as warm as the esteem in which we hold them. In fact, custom bids us go farther; and we are not considered hypocrites if to the arriving and departing stranger we somewhat exaggerate the true degree of our regard.

It is, therefore, quite proper to ask whether it is a discovered fact that foreigners seeking our heart of Empire, and provincials approaching their capital, receive from these ante-chambers of arrival an impression of warm-hearted and enthusiastic reception, to which nothing else in their sojourn quite approximates, save the equal geniality of the scene of departure.

I fear we must admit that London prefers to enhance the climax of its hospitality by showing to the approaching pilgrim less cordiality at the outset than is extended later on; and that the retreating visitor often finds the pangs of separation modified by the sense that steals over him during the final ten minutes of his stay that, after all, London is a fairly ugly and inhospitable spot.

* They are officially recognised as 16 by the Traffic Commission Report, 1905. London Bridge and Victoria are reckoned as two each, St. Paul's and Holborn Viaduct are

both elevated to full honours, and so is Addison Road. Fenchurch Street is not reckoned in the list of main terminals.

Having admitted these things, I am not intending to suggest either that all our termini are disgraceful or that even the less-comely stations are without some justification for their uncomeliness. I am merely wishing to point out in some of the remarks which follow that although in railway stations, as in other things, London has paid the penalty which falls upon pioneers—the penalty of being too easily outpaced by its successors—there is for railway stations, as for all other products of human contrivance, an ideal which is worth the seeking, even if it cannot be found, and, if found, cannot be copied.

Let us briefly take a survey of these twelve old friends, giving them praise and blame as they may seem to deserve them.

Euston comes first, being the terminus of that ancient London to Birmingham line which marked the earliest beginning of the steam approach to London. To Euston I do homage. There was nothing mean about Euston's birth. The London and Birmingham Railway meant big things from the very beginning. It is true that for years after the inauguration of the line the trains were brought from Chalk Farm to Euston by traction, not by locomotives, owing, I believe, to the diffidence of Parliament. But Euston Station was meant to be, and was, worthy not only of the great movement thus initiated, but of its future. That noble hall* and that splendid Doric portico (since outraged by encroachments) bear a ratio to the line then existing glorious out of all proportion when compared to any subsequent displays of London railway architecture. The platforms and their roofs certainly are an anti-climax; but Euston is setting its house in order, and it is not fair to judge of the station by its present condition; great improvements are in hand, and I, for one, do not yet know to what degree of amelioration they may tend. The glazed roof problem is a difficult one, and it cannot be said that in this matter we have always gone from good to better. St. Pancras, one of the earliest roofs, is still, to my mind, far and away the best. Sir Gilbert Scott, in the full blast of Gothic energy, astonished the railway world with a quasi-mediæval external elevation, and the engineer, far from letting him down with a disappointment, played up to him in an extraordinary manner. Instead of designing a commonplace truss and decking it with scraps of ecclesiastical castings, he made the discovery that a giant pointed arch, with a concealed tie beneath the rails, was the form best suited to his needs. The resultant effect is amazing. I have no hesitation in acknowledging that for grace, beauty of form, and sheer magic of fitness the iron and glass roof of St. Pancras Station gives me unqualified pleasure. It has an élan and charm which would be convincing even if it were, as I once thought it was, a bit of sacrifice to Gothic etiquette—but when one discovers that it is no mere concession to style but an example of direct, untrammelled engineering skill, the respect due to it is spontaneously given.

The only completely new terminus built under the eyes of my own generation is Marylebone, the London goal of the Great Central. To it we must look for London's latest utterance in station craft, and we look—with disappointment. It was conceived and born under the ægis of that mischievous theory that, if only the street front of a station is masked by an ostentatious hotel, the station proper (or improper) can be left to the—engineer.

There is no reason, I think, why I should not speak courageously on this point. I will admit freely that stations have primarily a utilitarian function to perform, also that railway companies are not primarily either philanthropists or patrons of art. But the doctrine that, in what I may call the platform part of a station, beauty and design are unimportant is, in London at least, an unworthy doctrine. We architects know quite well what we mean when we say that there is no class of public building to which it is impossible to impart at least distinction. Railways have rather overlooked the fact that mere size instead of excusing ugliness conveys an absolute obligation to avoid it.

* The hall is, I understand, later in date than the portico; this accounts for their not being axial with one another.

We have in the stations a repetition of the old and sad story of the Thames bridges. The discovery that iron was cheaper than stone for the task of crossing the river was seized all through the latter half of the nineteenth century as the basis of a horrible argument; the premises of that argument were false, and the conclusion—which took the form not of a spoken word but of a series of indecent facts—is now awaiting refutation. It is a good rule of civic decency that beauty is always possible in small things, but that in big things it is imperative.

Paddington, perhaps you will say, is a bad shot at the beauty target. Well, I admit it is, but at least it was a shot. Wyatt was called in, and perhaps Wyatt failed. His affectation of the Moorish mode was unhappy—but it was well intentioned. There is certainly grandeur in the big arcuated spans of the glass roofs, which are worlds removed from the timid and prosaic horizontality of our later efforts. Paddington again almost enters the region of romance from its enshrinement in Frith's picture. How we have all derided Frith! I wonder if his day may not yet be coming.

King's Cross might be named after Landseer's picture, Dignity and Impudence. One can hardly find among the street sights of London a more striking combination of vigour with debility than the south elevation of this terminus. In the sheer strength of direct purpose the engineer flung up those two Cyclopean arches, and in between them he set out to design an architectural climax which should unite and crown the whole design; the result was failure—he turned his drama into a farce. I would guarantee that the offer of a prize of five guineas to architectural students under twenty-five would produce more than one good scheme for raising this elevation to nobility at a cost of under £500. But why, I wonder, has King's Cross forgotten all this time that it has a forecourt—or at least a foreground. For many a year this rather shapeless but, I suppose, valuable site was dedicated to the display of rustic seats and summer houses, the wares of some favoured merchant. At last, when tube railways came into use, we were made aware of the prospect that this fruitful field would give birth to a little stationette. The stationette arrived—rather more highly coloured than we expected; but it evidently took everybody by surprise, for the position which it assumed bids defiance to any possible scheme for laying out this open space in some sort of relation to the great building behind it. I confess, I am amazed.

Euston Road was protected as to its width by Act of Parliament, yet so valuable was the frontage soil in that road that in course of years every front garden was built over with shops, and the records of the late Metropolitan Board of Works are darkened with breaches of this particular trust. The Board gave way to the land grabbers, with the result that the County Council has had no inconsiderable difficulty in stiffening its own back to resist or repair these and further encroachments. Land, in fact, is in this district valuable, yet a spare corner of important frontage is first wasted and then misapplied. London is a wonder-city.

Of Charing Cross and Cannon Street we shall speak later. Charing Cross we know succumbed (as regards its glass and iron roof) to premature decay; and was rebuilt in the manner which I am still unwilling to regard as the last word in the steel artist's vocabulary of beauty. Cannon Street still maintains, when viewed from the river, an almost picturesque suggestion of one of the minor entrances to the Infernal Regions.

To Holborn Viaduct I will be generous, and forget its existence. I have always admired the architecture of its hotel front to the street, but as a station one can only say of it that it is quite conspicuously inglorious.

Civilisation has many grudges against history. One of these is the regret that railways and steam were not invented in the time of the Romans. There can be no doubt that if this had been the case the Romans, true fathers of our European economy, would have left us a lesson in the laying out of railway routes; little doubt also that some of their actual railway stations would remain. A railway station would at least wear as well as a basilica or a public bath. Here and there over the continent of Europe—perhaps even on our own island plot—there would still be standing vast majestic piles of

monumental masonry serving at the present day the very purpose for which Rome had reared them. The advantage to us would be immense, for not only should we find in them that ancient sanction without which, as architects, we are so often timid, but also, and conversely, we should be rid of the excuse which is supposed to justify the deformity of all architecture connected with distinctly modern needs. The Briton discovers the steam engine and proceeds to make use of it, yet, in spite of the conservatism which compels him at the outset to call a railway carriage a "steam-coach" and to model it on the lines of a four-in-hand "Tally ho," he proceeds in contrariety to invent and to reverence a doctrine that steam-travel being a modern contrivance it may or should be housed in a sort of futurist building craft—in other words, that its attendant architecture should be no longer architecture at all [that is, building based on the tradition and the nobility of precedent], but building of which the form and genius are inspired by spiritless expediency—in fact, by that lower grade of engineering which lacks culture. All honour then to Euston, St. Pancras, and Paddington, which, in their degree and after their kind, withstood this untoward modernism. Waterloo, the modernisation of which is rapidly approaching a measure of completion, had a good chance, which for a time at least it missed. The terminus of the South Western was, up till the year 1848, a rather stately little station at Nine Elms, the front of which was reminiscent of the portico of Sadlers Wells Theatre. When Waterloo superseded this unassuming erection it had to grapple—and the cab horses took their fair share of the grappling—with the problem of the high level roadway.

It is obvious that whenever a railway line makes up its mind to enter the heart of a metropolis it must do one or other of three things. It may, for example, come in on the level, in which case it either obstructs existing streets and roads or threads an ingenious track through a roadless region. Euston is on the level, and solves some of its difficulties by frank obstruction, others by diving under the primrose roots of Primrose Hill.

In default of coming in on the level it may sink below the general surface in a cutting. This was Paddington's idea—it is also the device adopted at Liverpool Street. But the measure is only a half measure, and the roads which cross the railway outside the station have to climb for the necessary bridge height. The third course, which was adopted by nearly all the South London lines, is a courageous policy of overhead travel, necessitating miles of arched and bridged causeway.

It cannot be said that these long rows of arches have added to the beauty of the Surrey side, though I imagine that in a ruined London some centuries hence they may possess a pictorial and antiquarian interest not unlike that of the aqueducts on the Campagna. It is this high level device which makes possible the crossing of the Thames at Charing Cross, Blackfriars, and Southwark.

There is, of course, a fourth expedient, not yet adopted in London, which I may call the policy of the Quai d'Orsay. In idea this is splendid—it is partly splendid in execution. The trains are kept below ground, the booking offices, waiting halls, and administrative quarters being all on the street level. Thus space is halved, or nearly halved, and the upper level departments gain greatly in dignity. But the train platforms suffer in light, comfort, and convenience. Moreover, it is impracticable to have steam engines employed in these basement domains, and it becomes necessary to exchange steam for electricity at a point outside the underground portion of the route. Whenever, and if ever, all trains are run by electricity, this device will no doubt grow in favour.

The Waterloo (to return to the South Western) which first superseded the Nine Elms terminus was, as we know, a very poor and mean affair. But recent years have shown a very hearty development, and the new station has about it many of the elements which one hopes to see in the station which is aware of the dignity due to its size.

Victoria, again, is a notable instance of reconstruction. The gentleman who designed the blank wall in Buckingham Palace Road did it right nobly, and there are good points about the main front. It is true that Victoria's iron roofs, though lofty, are uninspired, but the really worst fault of the station is its inordinate size or, rather, its inordinate length. The lack of width had to be

compensated for by forward extension, with the result that the distance from the booking office to the railway carriage is in many cases immense. A wider station farther to the south-west would really have been more satisfactory. "Let them all say what they can, 'tis for one end—the use of man." Here the use of man is not always met, for it is in a small way a hardship after buying a ticket for Brighton and allowing the necessary two minutes' margin of time to be told that the first instalment of the journey has to be done on foot and at quarter-mile pace.

Liverpool Street is also a monster, but it, you will have noticed, gets over its difficulties by lateral expansion, and here the man who happens to know at which side of the station it is best to enter may often save the precious minute necessary to his object. The high and low level entrances for passengers and the bridge connections from platform to platform are cleverly arranged—specially in view of the fact that the great bulk of the passengers are luggageless suburbaners.

The station or, rather, stations at London Bridge are relics of the intermediate barbarism between the prophetic courage of Euston and St. Pancras and the mean modernism of St. Marylebone. We are a very unambitious people, and in public matters very ungrasping. London Bridge Stations are a fair type of the kind of thing we accept as good enough for us. Architecture is either worth nothing in the scheme of civic economics or it is worth a great deal. If it is recognised as acceptable and permissible, I should venture to say that no building within the metropolitan area which is visible to a minimum of a thousand people per diem and is worth a minimum of a hundred thousand pounds should under any consideration whatever run the least risk of being justly described as unarchitectural. Under this most moderate canon I excommunicate the seven acres of railway stations at London Bridge.

But apart altogether from the question *what* a railway station should be, there is another question—and one which is at least as important—namely, *where* the station or stations should be. In fact, the great question of disposition—and this is after all of as great importance.

I believe there are still a few people who imagine that in a perfect and Utopian London there would be not many termini but one. In a few seconds we will dispose of this strange idea. Centralisation of either roads or railways is, except in a very small town, a terrible mistake. We can prove this—as regards roads—by standing for ten minutes at the Mansion House. There—as interesting relics of London's almost prehistoric littleness—we find a group of supposed desiderata with a cluster of roads centering upon them. Ancient tradition prescribes that the house of the chief officer, the treasury of the nation, the seat of commerce, and one or more places of worship should be grouped round the nucleus of the town, and that for purposes of swift access to them every main high road should impinge on the same point. But it may be taken as an axiom of town planning that, as soon as any town is as big as, let us say, two miles square (or four square miles), such a concentration becomes not a convenience but a horrible incommodity. Nay, more; when a town reaches the size of modern London—or even half that size—the official buildings, which originally were things to be sought, become things of little interest to the majority or even things to be shunned. I am, I hope, a law abiding citizen, a Christian, and in a small way a money saver, but my only visits to the Mansion House have had no connection with the Lord Mayor's government of the City, my visits to the Bank have been merely calls on the architect, and my churchmanship is better met by churches other than those which cluster round the Royal Exchange. In fact, the converging of roads opposite the Bank is to nearly all of us nothing but an impediment in our journeys through the City; and even if the buildings I have just mentioned were all of occasional importance to our business or spiritual life they would minister to our needs much more expeditiously if they were all at least a quarter of a mile from one another. Similarly, the concentration of our railway termini into a single station would have almost incalculable disadvantages. The station, in the first place, would be so large that on starting a journey from it we should all have to walk on an average a furlong to reach our train. In the second place,

none but habitués would have a reasonable chance of finding a train at all, in spite of indicators. And thirdly, the confusion and crowding would be very great.

No; the central station would be a vast and terrifying nightmare of disorder. Its size, according to moderate computation, would be 100 acres, and if one comes to think of it, the result of its existence—wherever you place it—would be that the great majority of people would complain that it was too far from the place at which they wish to be landed. Another trouble would be that the discharge of so huge a multitude at a single spot would result in a great overcrowding of the means of local transport, omnibuses, trams and tubes, at that centre.

Of course, it may be argued that not every one would travel to or start from the terminus, but that many would stop short of it. In fact, I can imagine some designer of London improvements taking a map of London and doing with it something like the following:—

Link, he would say, Paddington with King's Cross, throwing in the Midland Railway as a branch. By an equally bold sweep join the Great Central line to the North Western. Then fling a courageous arc of rails from Victoria to Liverpool Street, and bring in branches from Waterloo and London Bridge, and with the result that you find everything converging in Covent Garden.

There you have your central station, but to avoid the inconveniences arising from undue centrality—such as the grumblings of the West-enders and the East-enders, and the Stock Exchangers and the Gray's Inn architects, none of whom want to be shot out at Bow Street—you can retain each of the old termini as a kind of penultimate terminus. In fact, just as there now is an Ealing and a Westbourne Park on the Great Western, a Willesden and a Stratford on the North Western and Great Eastern, so you would have—only farther advanced—new London half-way houses made of the old terminations.

Moreover, says this wise fellow, you can link all these penultimates up by a circular tube touching each one in the way that is now being tentatively and fragmentarily attempted by the present disjointed tubes.

Again, he will add, my central station enables easy transfer at the Covent Garden junction between every main trunk line.

Well, in the first place it must be pointed out that the objection to the central station would still remain on the ground of its abnormal size, and yet another trouble would have to be faced. Railways, as we have recently noticed, can only cross streets by going over them or under them. These bold curves and dashing branches would either require to be carried overhead like the grim viaducts which disfigure southern London, or they would have to plunge below ground—in some cases below Thames—and would call for a treatment like that which we have just now mentioned as prevailing in Paris. The latter would, indeed, be the preferable course.

In thinking over this question of centralised stations I asked myself—and I may say that I did this before the recent dream and vision of Sir Aston Webb—I asked myself whether there might not be something to be said for the idea of a pair of termini, one on the north, collecting all the lines that serve the northern, western, and eastern trunk lines; another on the south or Surrey side, gathering together the South Eastern, South Western, Brighton and Chatham lines. These two main stations could be linked together by a series of parallel lines passing under the Thames or, if a really decent bridge could be designed, *over* the Thames; and there would thus be provided through rail connection between north and south. It is rather surprising to discover with what comparatively small alterations of route the various railways could be assembled for this purpose.

But before I heard of Sir Aston's dream—which is, I admit, very attractive—I threw this idea also aside, feeling that, though in a less degree, the evils of concentration—viz., undue size of station and undue congestion of road traffic—applied to this also.

It would be wise, would it not? to ask ourselves whether the distribution and separation of termini is not really in itself a blessing, and secondly, what, if that be the case, is the ideal

position for the termini, London being what it is and the directions of the main trunk routes being what they are.

It is not wise, of course, to take too many data for granted, so we may in passing even go a little farther back and enquire whether, as our railways have grown up piecemeal, they are approximately what they should be as regards number and general position. If we were mapping out a rail-less England for a new and virgin scheme of rail-roads, and were assuming, as I think we should rightly assume, that convergence on the capital is desirable, we should probably devise something of the nature shown on my slide.

This gives us thirteen main lines—a very reasonable confirmation of our present system of twelve termini.

I next offer you an illustration showing how these thirteen lines would most probably impinge upon the capital, and how, if we accept the principle of reasonable separation as a blessing instead of a curse, they would most naturally take their stand in the matter of termini.

You will observe that there are, as at present, many more stations on the north side than on the south; this is due simply to two reasons: one is, that the river bends away from the north in both directions, but the other and far more important reason is, of course, that since for reasons known to history London has settled down in the south-east corner of this island there is much more territory for the railways to cover on the north than on the south.

In this connection I will point out, as I have pointed out before in other connections, that London has suffered too long from the false idea that the regions on the south side of the Thames—I will rather say on the right bank of the Thames—are either non-existent or inaccessible. The theory that to be within striking distance of the metropolis you must be on the left bank is quite a ridiculous one. It dates from the days when London Bridge was either not yet built or was the only bridge. The arrival of Westminster Bridge did, it is true, something to break down the theory, but the other and newer bridges have never quite sufficed to induce belief in the undoubted fact that Southwark is much nearer to the Bank of England than are the National Gallery and the Abbey. Recent events will, I hope, serve to make it clear that the territory on the Surrey side is at least as available for building and for business as many of the sites in Middlesex, but I should still despair were it not that the County Council has fixed Lambeth as the seat and centre of Local Government, and that the owners of the London and South Western Railway have had the courage to rebuild their station (Waterloo) in the rash but steadfast hope that the Surrey side is near enough to the heart of things to serve for all time as the goal and finish of their Londonward journeys. London Bridge Station has never felt sure of its prestige. The stations at Holborn Viaduct, at Charing Cross and at Cannon Street are evidences of that hankering for the northern shore which is based on the ancient tradition that London is in Middlesex only.

Let us look at this thing squarely. If London were a pin point in size, its great radiating railways would quite properly aim at that point. If, on the other hand—to imagine something less impossible—it consisted of two well-confined quarters—a business haunt and a residential region—then each of these lines would reasonably aim at duplicate goals. Evidence of this practice is seen in the rather commendable system under which the South Eastern is represented both by Cannon Street and Charing Cross, the North Western by Euston and Broad Street, and the Great Eastern not merely by Liverpool Street, but also by the use they enjoy for certain trains of access to St. Pancras. This arrangement, I say, is rather commendable, but I purposely modify my commendation.

Setting aside goods traffic, let us think of passengers. Passengers on main lines are of two kinds—viz., those who, having luggage, are obliged to drive to or from the terminus, and those who, having no luggage, are, or may be willing to walk to their destinations on arrival; of the latter class are the vast army of daily travellers who live in the outskirts or suburbs and work in the town.

Now, it is true that a great many workers who are free to choose their suburban homes purposely

select a locality served by a railway whose terminus is reasonably near their place of work, but, on the other hand, there must be a great many who arrive every morning at a station which, though closely adjoining the place of business of some of their fellow-travellers, is at such a distance from their own as to necessitate a further journey on foot or by cab, car, or underground train. Put it this way. The twelve great termini stand, roughly speaking, on the circumference of an irregular oval measuring three miles by two miles, and these six square miles are—also roughly speaking—coextensive with the chief business area. The actual area which is daily flooded by workers from the suburbs is, as a matter of actual fact, very greatly in excess of this size; but, assuming as a basis this area of 3 miles by 2, it is clear that the average distance travelled after reaching the terminus by each arrival must be something like $1\frac{1}{2}$ miles.*

This being so, it would scarcely be a great hardship if, in the interests of general traffic convenience and also in the interests of beauty, the position of some of these termini were to be slightly removed from their unduly central position.

Now I am prepared to contend that, viewing the matter generally, there is everything to be said in favour of a distribution rather than a concentration of the termini.

Before the birth of Euston, Parliament, in sanctioning the first stage of the London to Birmingham Railway, stipulated that it should not come nearer the centre of London than Chalk Farm, and if you will glance at the map of London in 1840, some years later than the establishment of this railway, you will see that Chalk Farm was in those days a comparatively rural spot.

Times changed, and the station of terminus became Euston. When St. Pancras, King's Cross, and Paddington followed they were all by common consent placed on the north side of the then New Road. I have written elsewhere on the New Road, that fine enterprise of our grandfathers, which was as bold a foretaste of our modern town-planning as one can well conceive. That men of that age should have appreciated the desirability of forming a circuit road from Paddington to the north of the city, along land which was then available, because not yet absorbed into the building area of the metropolis, was at least a remarkable fact in the history of municipal foresight. And the additional idea of making this road the southward boundary of the main railways of the north and west was another fine stroke of orderly town government.

In course of time railways crossed the Thames. There are now four such bridge crossings. One, the least objectionable, is that which conveys the two main lines from Victoria Station. Another is the monster which issues from the jaws of Charing Cross. A third is the disfigurement adjoining Blackfriars Bridge, and the fourth is that which feeds Cannon Street. For these three last I contend with fervour that there is no need. I go farther and predict with equal fervour, and some measure of hope, that in due time they will confer on the beauty of the Thames the homage of graceful disappearance.

I am anxious to maintain that there is no good reason why the termini of the S.E. and L.C.D.R. should approach much nearer to the centre of London than do the termini on the north of the G. W., G. C., L. & N. W., G. N., and Midland. If one takes, as one reasonably may, a line running from the Bank to High Street, Kensington, as representing the centre line of the commercial and residential parts of London, it will be found that the nearest of the northern stations is $\frac{3}{4}$ mile from it and the farthest $1\frac{1}{2}$. The line is, I think, a fair line, for its course passes through the Ritz Hotel. On the south of it Victoria and Waterloo are distant $\frac{3}{4}$ and $\frac{1}{2}$ mile respectively, and London Bridge is at about the same distance, while Charing Cross and Cannon Street are within a furlong, and Holborn Viaduct has overstepped it northward to the extent of half a mile.

Why, I ask, should the three latter stations add to the confusion of London's traffic congestion

* The Traffic Commission reckoned that the journey made by each passenger on foot or in cab or omnibus averaged three-quarters of a mile, but this did not include the sup-

plemental journey by the Metropolitan or District Railway which many performed after leaving the terminus.

by planting themselves so impudently in the heart of our civilisation. It will be answered, of course, that the south side of the Thames doesn't count as recognisable territory, and that to be deposited there—even if one be nearer St. Paul's or Piccadilly Circus than a traveller arriving at St. Pancras—is not to be reckoned as arrival in London. To this I answer that the lands north of King's Cross and Euston are at least as much like deserts as are the surroundings of the Elephant and Castle, and that the Surrey side—though possibly it has only just been discovered by that Columbus who, greatly daring, planted there the foundation stones of the County Council's Hall—nevertheless, is now no longer a *terra ignota*, and there is no substantial reason why it should not in the very early future be found capable of bringing forth and nurturing other buildings of architectural value and of metropolitan importance. Recent hopes and aspirations point to the probability of a noble avenue, or an equally noble quay, along the south shore of the Thames. My personal cravings are in the direction of the latter, for I think that we lose much of the poetry of London by failing to acknowledge and to ennoble her riverside trade. But south of this quay should be a fine road from Westminster Bridge to Southwark Bridge—or, if you prefer, from Lambeth Bridge to London Bridge—and beside that road should stand a new station intended to take the place of Charing Cross, and the stations at Cannon Street and Holborn Viaduct. Some of my friends favour, I know, the idea of placing this new station alongside of Waterloo and approaching both by a high level bridge spanning the Thames at the spot where Charing Cross railway bridge at present stands. For my own part, I prefer the place midway between Waterloo and London Bridge at which the South Eastern and Chatham lines are met by the line which runs north to Holborn Viaduct. The access from such a new station to the City and the West End would be exceptionally good, it would only be half a mile south of my line of axis, and it would act up to the principle, which I honestly believe to be the right one, viz., that the termini should be not in the centre, where they create overcrowding; not close to one another, where they disturb each other's streams of traffic; but standing more or less in a ring round the centre and fairly equally distributed.

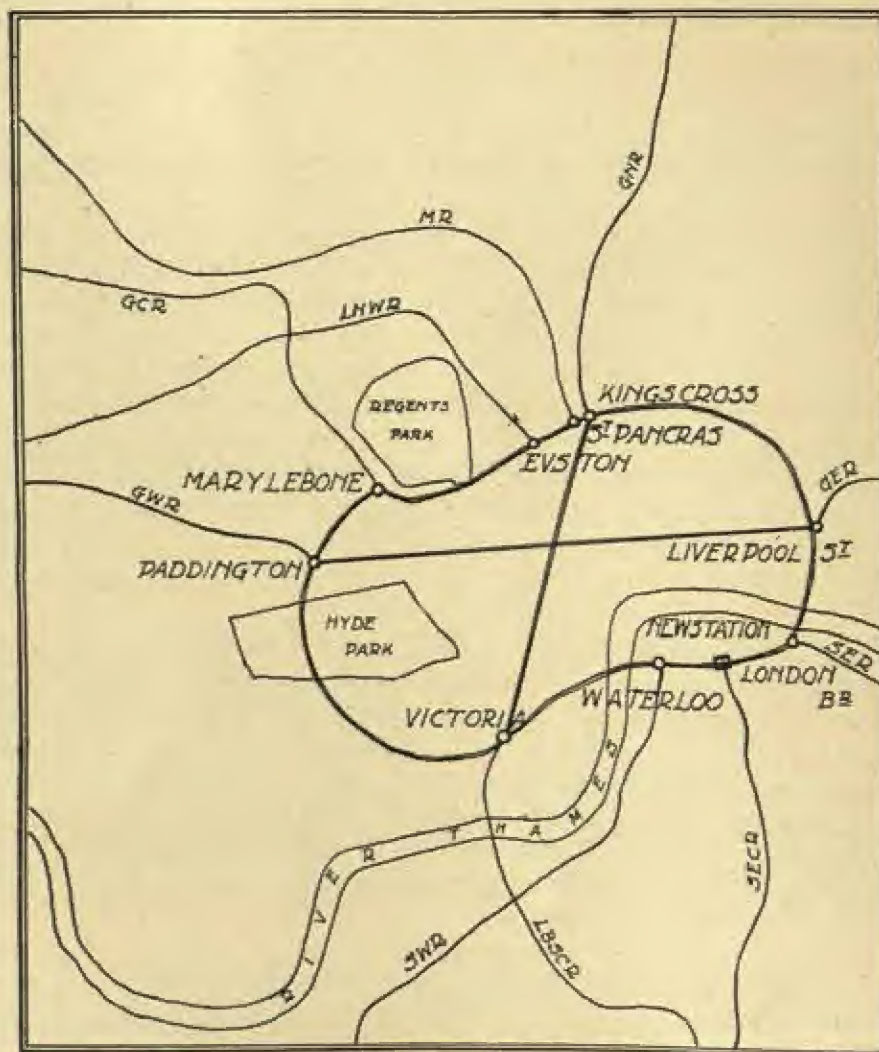
And here let me not conceal from myself, or from you, that, had I no such arguments to offer for keeping the South Eastern Railway on the south-eastern side, I would still plead with might and main for any readjustment of our railway system which would rid the Thames of those three blemishes: the iron bridges at Cannon Street, Blackfriars, and Charing Cross. Were the riddance Utopian it would be worth praying for, were it Quixotic it would be worth paying for, but if it is good business let us have it at once, and prove that the useful and the beautiful are indeed one.

If you will refer once more to my imaginary plan of the thirteen imaginary termini of thirteen imaginary lines you will see that to a very large degree the positions of the phantom stations coincide with those of some of the present ones.

My Scotch line and Newcastle line arrive at Euston and St. Pancras. The Cambridge and Norwich lines terminate, it is true, right and left of the Angel—a very good place for them—(instead of at Liverpool Street), but the Southend line runs into Fenchurch Street, the Dover line ends at London Bridge Station, and the Brighton line at or near Victoria. The termini for Bristol, South Wales, and Cornwall, &c., are by my $3\frac{1}{4}$ mile circle brought rather nearer to the centre of Mayfair than our present feelings would allow, but that rather proves than disproves my point. If we refuse to put a station near the Marble Arch and another near Hyde Park Corner, on the ground that they are too intrusive, then why in the name of civilisation do we allow them in the Strand and on the precious ground between the Thames and Cornhill? In fact, I have proved that if you turn a circle of a radius of $1\frac{3}{4}$ miles with Charing Cross as its centre no railway station or terminus need impinge on its circumference.

As a matter of fact, of course, the heart of London is defined not so much by a circle as by a sort of oval, and the laying down on the London map of this figure will make my points clearer. [This oval outline corresponds very nearly with the course of the imaginary circuit railway shown in

the diagram below.] My oval, you will see, actually touches with its circumferential line eight of the twelve termini at present existing. Two others, Liverpool Street and Fenchurch Street, are almost on it (being just outside), and the only remarkable transgressions are the invasions of this sacred enclosure by Charing Cross, Cannon Street, and, if we may reckon it among the termini, Holborn Viaduct. I therefore consider that, with these exceptions, the positions of our termini are reasonably near the ideal arrangement.



It remains to say a few words about the connection between the termini. Ideally, there should be a railway system uniting the whole of these stations. The old Metropolitan and District railways made a good start by linking together King's Cross, Paddington, Victoria, Charing Cross, and Liverpool Street.

It is true that their grip on the termini was somewhat faltering. At Liverpool Street, Victoria, and even at King's Cross, the transit from the main line train to the underground train is longer and less easy than it might be. Still, the principle aimed at was good, and the main idea, a circular railway, was excellent. Since the days of this early effort the underground communications have, as we know, been more than doubled in mileage, but unhappily that increase has been effected with an extraordinary lack of system. The Central London Railway,

wisely appreciating the fact that a circular route needs to be supplemented by a diametrical one, made a dash across the major axis of the ellipse. But with what strange lapses of fulfilment! Why was there no joint station at Notting Hill? And why was the connection at Liverpool Street left out for years, only to be recently accomplished as a kind of afterthought? Again, how easily might Paddington have been reached? But Paddington was left to be picked up as part of another system which practically duplicates the line of the old Metropolitan from Portland Road to Paddington. This is sheer waste of prime cost.

Three routes tunnel under the Thames. The old Waterloo to City Railway—a singularly cheerless catacomb, which delivers at no intermediate station—the City and South London, and the Baker Street and Waterloo. Had these Thames crossings been arranged with any eye to general utility they might most easily have been better placed. In fact, it may be said at once that if it had been the business of any one person of intelligence to make sure that these piecemeal contributions to the railway system of London were sanctioned or vetoed in relation to some general scheme, there can be no doubt that the public would have been much better served, and the railways themselves would have been more remunerative.

Just think what simplicity would have done for London.

Form a railway uniting the whole of the great termini (except Charing Cross and Cannon Street) in an irregular oval route, and then form two diagonal routes connecting Paddington with Liverpool Street, and Victoria with King's Cross. The intersection, you will find, is exactly at the site of Tottenham Court Road Station. From the periphery of this irregular figure you can cast out as many branches as you please into the suburbs, and, as a matter of fact, you can easily connect to it the existing suburban lines of the present systems. The really remarkable feature of the plan is, however, that, treating of the area within the ellipse, you will find that you can replace upon it nearly all the existing stations, and yet you have saved four or five miles of rails and have made it possible to get from anywhere to anywhere with only one change.

Compare this, for example, with the present difficulty of getting from Chancery Lane Station to Victoria.

Is it not clear that, in the matter of internal rail communication, no less than in other matters, London has suffered to an incredible degree the inconvenience, expense, and disfigurement which the simplest of central control, the most elementary of preconceived design would have converted into convenience, economy, and decency.



West London Railway Bridge

DISCUSSION ON MR. WATERHOUSE'S PAPER.

Mr. ERNEST NEWTON, A.R.A., *Vice-President*, in the Chair.

MR. H. V. LANCHESTER [F]: I have much pleasure in enlisting your suffrages with me in this vote of thanks. I think we all feel that Mr. Waterhouse has given us a great deal with which to fill our minds, not necessarily in what he has said, but in what is in his mind behind what he said. I should like to ask him his views on a few things, for I do not think we could do better than study some of the points which he has not had time to develop when trying to compress into an hour what was legitimately material for a very much larger handling. The first thing that struck me when Mr. Waterhouse was speaking of those great roofs like the one he admires—an admiration which I share with him—is that from the inside the St. Pancras roof is a magnificent one. But a city is a city as a whole, and it seems to me that these great roofs, with their simple, long mass, rather unscale the rest of our City when we see them standing up among the more intimate and more delicate architectural designs. Take Cannon Street Station, for instance. Cannon Street, I think, is the one effort in which an attempt is made to balance the roof from end to end by those two towers to which Mr. Waterhouse referred in not too complimentary terms, though he did not intend to be unkind. He says he is hopeful of Waterloo, but I confess I always think it a pity that something different was not done with Waterloo. True, the station buildings are horizontal, and that counts for something in architecture nowadays. But the intricacy of its approaches, whether one is afoot or in a taxi, is architecturally bewildering. Surely on the Continent railway approaches to a high level are managed better than that? Certainly, as regards the approaches to Waterloo, there is oblivion of the architectural idea. I have read—in the *Railway Gazette*, I think—that the eminent engineer of the South Western Railway and some of the Directors visited several of the most important railway stations in the world, and that they intended to embody the merits of them all in Waterloo. From a practical point of view they may have done it, but æsthetically they have not; perhaps they left the æsthetic factors out of account. With regard to the length of Victoria, would it not have been possible to put a double-decked station there, and to have had the electrical station underneath so as to save some of those long runs? Again, while fully accepting Mr. Waterhouse's dictum that a big central station would be an impossible solution of our railway difficulties, would it not be a more economic method in principle to make

all our big City stations through-stations, and not terminal stations? In the matter of shunting and crossing in and out traffic there must be a great deal of waste in the terminal station. If pairs of stations could be linked up to enable this work to be done, and for trains to be shunted and re-directed outside London instead of inside the most valuable part of the City, as is done in many of our big provincial towns, I am inclined to think that it would be an economically advantageous thing. Lastly, there is one point on which I was extremely interested in Mr. Waterhouse's remarks—viz., the advantage which a general scheme would have been in laying out our new electrical underground railways. These railways, I suppose, are pretty well complete, so that a general scheme is now too late, but we have immediately coming upon us the necessity for a general scheme in our street improvements for ordinary open-air traffic. In this matter we shall waste money and involve ourselves in all sorts of muddles and extravagances if we do not have a general scheme. I am glad to see that it is everywhere recognised that a general scheme is absolutely needed. The Local Government Board, we know by the conferences that have been held, is in favour of a general scheme for London and its surroundings, and I hope it will include street improvements in the centre portion in regard to what will be needed in the future. If we do not have a general scheme, we shall have to go through the same trouble and the same disturbances as we have experienced in our Tube and other underground railways.

MR. FRANK POTTER (Manager of the Great Western Railway): As a visitor, and as hailing from the third of the trio of London termini which Mr. Waterhouse singled out for honourable mention, I should like to express my sincere appreciation of your courtesy in inviting me to be present here this evening to listen to the very able Paper which has been read. We have all been charmed and entertained by the manner in which Mr. Waterhouse has dealt with the subject, and, if it does nothing else, it will give us all furiously to think, because if only railway men could have their time over again, and could have the opportunity of re-arranging the approaches to our great Metropolis, they would certainly not arrange them as they exist to-day. However, great credit is due in certain quarters for the foresight which was displayed in connection with some of our London termini. It has always been a matter of surprise to me that Mr. Brunel and Sir Matthew Wyatt,

with whom he was associated, were able to look so far forward into the future as they did in designing a station which, whatever its claims may be to architectural beauty, has nevertheless, for nearly sixty years, answered the requirements of an extending traffic, and it is only in the last few months that we have had to bring into use a line which was outside the limits of the original design. That, I think, reflects the greatest credit on the foresight of the architects who designed Paddington Station. With regard to other features in Mr. Waterhouse's Paper, I was very pleased to hear his references to the suggestion that no advantages are calculated to accrue from a highly-centralised depôt. I gathered from his later remarks that he had been furnished with particulars of a scheme relating to goods traffic; and if he had been able to deal with that particular scheme he would, from a professional point of view, have had a great deal that was most interesting to say upon it. From my own point of view, I consider what Mr. Waterhouse did say with regard to the inevitable congestion arising from a central passenger station as applying in even greater degree to a goods station. So far from relieving the congestion in our roads, it would do much to accentuate it. Reference has been made by Mr. Lanchester to certain ideas suggested by the Paper as to the routes taken by the railways, and the fact that our termini are termini and do not afford facilities for through runs. We feel that if we had not to do so much back-shunting at our big stations we should be able to attain a higher standard of punctuality and handle our traffic more satisfactorily than is the case to-day. But anything in the nature of a forward run from Paddington would, I am afraid, seriously interfere with the amenities of Hyde Park and Kensington Gardens, and other valuable residential quarters. I am very glad to know that Paddington Station can be spoken of in such terms as those applied to it to-night: I shall now regard it with even more admiration than I have in the past. It recalls to me the story of an old employé who was found standing on the bridge which connects Paddington with Bishop's Road, and who being accosted with the remark, "So you can't leave the old place, can you?" answered, "No, I feel I must come once more to admire those truly beautiful spans." I mention it because it supports what Mr. Waterhouse said in including Paddington in the three stations which may be honourably mentioned in connection with architectural features in London. I have the greatest pleasure in seconding the vote of thanks for this most excellent Paper.

MR. H. HEATHCOTE STATHAM [F.]: I would like to say a few words in support of the vote of thanks. It is a Paper on a subject in which I am very much interested; and Mr. Waterhouse has made it very interesting, as he always does. I agree with Mr. Waterhouse that we should try to make a railway station architecturally impressive to the incoming foreigner. What he said about the Euston portico

was expressed in almost the exact words I should have used if he had not. I have always had the greatest respect for the London and Birmingham Railway for putting up that portico, for showing the feeling they had that they were going to do a great thing, and that it deserved a fine gateway. It is a piece of imitation Doric and not exactly what we would put up now, but it is grand and bold in scale, and shows they appreciated the idea of making the entrance to their railway architecturally effective. I have always considered it a mistake, architecturally, to front a railway terminus with a hotel. It may be convenient, but a hotel is a thing which, in its main character, always has to be much the same; you cannot get much character out of it. To my mind, the entrance to a great railway station should give you the impression of a great portico to a great road. I think a railway terminus is, in its associations and suggestions, a most poetic thing. You see there the starting of great roads which have to go over the whole country, conveying thousands of people every day on all kinds of errands, and it is a thing, therefore, which is worth treating in a symbolic architectural manner. I remember that at the St. Lazare Station, in Paris, it was intended to front it with an hotel, but the Service des Beaux-Arts said no, it should be a separate affair, and the station should have its own façade. Mr. Lanchester has referred to the room taken up by shunting, and that it would be better if this could be carried out in the country. Everybody who has travelled westward from Dublin will remember how it is done there. You are run out into the country two miles, and you are then shunted back. But the engineer to the new Victoria Station pointed out to me an ingenious plan which he had adopted to save time in getting the trains in and back again. He has got a middle line of rails between the two platform rails, and when a train is emptied he can shift it to the middle line of rails, and that does away with the time lost in shunting trains back. There is another point about which I feel most strongly—viz., the way in which railway stations are utterly disfigured by advertisements. When Victoria Station had just been finished, I was invited with a few other friends to luncheon, and we looked admiringly at all that fine expanse of clean brick walling. The engineer, who was present, said: "Ah, what a pity to think they are going to spoil it. I did all I could to persuade them to have no advertisements, but they said it is a matter of business, and they must do it." But there is another side to the matter, and if you are going to keep your stations attractive it is worth while considering whether they should be the exhibiting places for all sorts of miscellaneous advertisements. You will never get your stations to look well if that is done; and I would ask the authorities to consider whether they would not gain some credit by doing away with these advertisements. It would, in some way, compensate them for the loss of money. With regard to the underground railways, Mr. Water-

house mentioned that they were not laid out with any regard to connection with each other. I am always amused and pleased with the accidental way in which you are led from the underground rail to the lift which is to take you up. The railway companies evidently thought it was good for us to have some exercise after sitting in carriages underground, and so they provided a series of lanes and turnings, so that, if the station is a new one to you, you never know which way you must turn, or how far you will have to walk. It is a little excitement, and it is better for one to have this walk to do.

MR. G. A. T. MIDDLETON [A.]: I should like to add my thanks for this admirable Paper. In spite of the humour of its early part, and my great enjoyment of it, I was most interested in the second part, and particularly in the schemes Mr. Waterhouse suggested for circular routes round London connecting the railways and roads. In all those he has taken it for granted that Charing Cross and Cannon Street Stations are wrongly placed on the north side. That idea I had myself some years ago, and Mr. Waterhouse's suggestion for a South-Eastern station, a central one, on the south side of London, occurred to me, and that it should be in the same position as he has placed it. I am not sure that it is impracticable, even as things stand now; could not the loop line running from Charing Cross to Cannon Street be converted into a fine high-level roadway, connecting those two points, and enabling a South London station to be made? That same roadway would link up Waterloo Station and London Bridge Station *en route*. This seems a possible way of doing a great deal for the South London termini, making them well available from all other parts of London. I had developed it at one time to a greater extent than that, with a further idea of using the other loop to Holborn as another roadway. But this is hardly the occasion to develop the idea fully.

MR. EDWARD WARREN, F.S.A. [F.]: I am not behind any of the other gentlemen who have spoken, in my extreme admiration of the Paper which Mr. Waterhouse has given us. Like all that gentleman's lectures, it is fraught with the charm and wit which have made of a subject that might have been over-scientific and even dry, one which is quite entrancing both in the manner of the Paper and the interest of its illustrations. One thing, amongst many others, which strikes me, in relation to the possibilities of great terminal stations in London, or in any other large city, is that it is useless to expect to have a fine entrance façade to a station unless you provide it with a fine approach. Almost every continental city of any size has a dignified and spacious court of approach to its railway stations. The smallest and meanest French stations have always an ample "place" or square of approach. At many of them, if you miss a train, you can wait for the next under the trees or by the fountain of a garden set in such a "place." It is the same thing in Italy. In London,

where space is of such enormous value, we can only hope to get fine approaches to fine railway stations if the site for such approaches is provided by the Municipality, or the State, or both. You cannot expect railway companies to acquire and demolish costly property in order to provide that stately approach to their terminal stations, without which our entrances and exits to and from the metropolis can never be divested of the ignominious scuffle we at present experience. I consider that the really fine station of St. Pancras is marred by the narrow uphill vermiculous approach to the mean court in front and the cramped court at the side, with all their dangers of collision. Is it not almost inconceivable that a civilised people, having built such a station, should be willing to put up with so miserable an approach, with such paltry means of ingress and egress? In this question it is necessary then to consider, not merely the resources and interests of the railway companies, but to cultivate a care for fine disposition, in regard to our railway termini, on the part of municipal authorities. And this works back, through the municipalities, to ourselves who are, as citizens, after all, responsible for the municipality, and therefore a greater interest and keener pride in its railway stations must be fostered in the minds of citizens.

MR. C. L. MORGAN, Chief Engineer of the L.B. & S.C.R.: I wish to thank the Council for the privilege of being present this evening to hear Mr. Waterhouse's most interesting Paper. The question of terminal stations is one that has closely concerned my professional career. In my early pupilage days, in the very early 'seventies, I was on the metropolitan extensions of the Great Eastern Railway, including the construction of the first Liverpool Street Station; and I had the privilege in the early 'nineties of being engaged on the enlargement of that station, of which the author said it was so difficult to find your way in when you get on the footbridge. I was also fortunate in being the engineer for the enlargement of Victoria Station, so you will agree I have had some experience in regard to terminal stations. But I feel a little bit out of my element to-night, being in the midst of an artistic gathering, where the question of art necessarily, and I think rightly, takes the first consideration. But as an engineer I have to approach this question principally from a commercial point of view. I am sorry that is so, for I have some sentiment in my nature; still, the aspect of pounds, shillings, and pence has to be considered also, and the utility of the stations. Consequently, in laying out terminal stations you cannot give vent to your flights of fancy from an artistic point of view; that is, you cannot make that view pre-eminent. You have in most cases, and particularly so in London, to consider your confined conditions; if you take one square foot to the right or to the left, you have to consider how many thousands of pounds it will cost you. You are hampered in all

directions—and I say it advisedly—by the requirements of Local Authorities and the fatherly protection of the London County Council; and when you get also Borough Councils and the London Traffic Board, and the Police, who have to regulate the traffic, you feel very hampered. When you have dealt with four separate authorities and got your plans out in regard to one particular road, and have satisfied these authorities, the amount of individuality left is, I assure you, very small. I say advisedly you cannot do what you wish to do when you are designing a station or any public work of that kind; it is a very difficult problem to satisfy so many outside interests whilst protecting those of your company. I am most interested in the second part of the Paper. If I may say so, the Paper is one which is full of thought and exceedingly able, and gives much for consideration, even to those who have made a study of the subject. If we could, as they say on the Stock Exchange, "job backwards," what a different condition of things we should have! We know what our present requirements are. Had we known what our present-day conditions would have been even twenty years ago, what a difference there would have been in many of our works! But we must take the birds as they rise, and deal with these matters as we find them. To come back to Victoria Station: I admit at once that it is not an ideal station. I had Buckingham Palace Road on one side and the Chatham and Dover Railway on the other. If we had built the station out further towards the Chatham side and occupied their site, there would have been all the expenditure of buying property, interference with roadways and reinstating the Chatham Company; and if we had touched Buckingham Palace Road and the valuable property on the other side of the road, it would have been such a big thing that it would not have been a commercial quantity to widen the station. The thing remaining was to get in length what could not be got in width. There again, if I were laying out the station and had a free hand, and not trammelled by such conditions as indicated, I would have no platform longer than what is required for the longest train; I would have no platform long enough to take two trains. There are many old stations at present which have platforms long enough to take two trains—one, I think, takes three, the Cambridge Station on the Great Eastern Railway—and I think I have profited by seeing what occurs at those stations. I profited by that in three lines between the platforms in the outer half of the station, and the inner end with only two lines, so the position is that the first train in, if the traffic requirements necessitated it, can be the first train to leave the station, and not, as is the case with other double-ended platforms, that the first train in must be the last train out. The first train coming in you can pass out by the middle road between the platforms in the outer end of the station, and then bring the train which has discharged in the outer end of the station to

the position vacated by the first train, and so arrange matters that passengers do not need to have a light railway to take them down to their proper platform. That is a criticism—viz., that the trains are too long—which has been made against Victoria Station. I admit they are long, and it is a blot, but we have got over that, I think, in the most practical and best manner possible. From the practical aspect, I believe it is one of the easiest working stations in London at the present time. There is this advantage: if we have a very long train, we can open that train out, and by means of the third road at the outer end, drop in the middle of it a horse-box or whatever vehicle we want; Mr. Potter, the General Manager of the G.W.R., who is sitting near me, will know what an enormous advantage that is. If we have a slip portion, we can put a horse-box on to that particular portion by opening the train out on the long platform. Mr. Waterhouse referred to St. Pancras roof; it is certainly a very fine roof; but, though I do not like prophesying, I think it is the only roof of the kind you will see in this country. The expense of maintaining such a roof, especially in our London atmosphere, and particularly owing to the deterioration arising from steam traction—it may be better when we all use electricity—is out of proportion to any benefits you may get from appearance or architectural effect. The experience of engineers is that you must have a roof of such dimensions and such form that you can easily maintain, repair, and renew it; one that you can get about on and paint, and can properly inspect, without great cost in scaffolding. You must also have regard to the grave risks there are in a roof of such spans of overlooking faults however closely inspected. I think it behoves everybody to have something that is practical, irrespective of appearance from an architectural point of view. The question of advertisements has been mentioned. I think I am a little fortunate in my General Manager, Mr. Forbes; I am really here as deputy for him, because it is a subject in which we take a great interest. I have an advantage in having him as General Manager because he has artistic instincts; probably many of you know that his brother is a celebrated artist, and Mr. Forbes the General Manager has got some of that sentiment in him. The first thing is, that you get a proposition for some very magnificent advertisements. It comes to the engineer, who is asked, Can that advertisement be fixed in a particular position? Is there any objection from a structural point of view? I say, "I hope you will not fix it in that position; we have been trying to save that one feature of this station." If you have such a General Manager as I have got he says, "We will leave that to be the last thing which comes." But, as sure as I am standing here, it does come. They say, "It is worth £150 a year; these are hard times, and there are all those shareholders who are wanting a dividend." So we have to give way, and up goes the big advertisements,

and the beauty of the station is spoiled. One of the speakers said he thought we might have an underground station or an upper-level station at Victoria. That was the problem thoroughly considered long before we started on the reconstruction of Victoria Station, and it was well thought out. Those who know Victoria and the gradients will follow me. There are three roads passing over the railway, and the line is on a gradient of 1 in 59 from the last bridge (Ebury Street) to the river. You cannot come from the high level over the river and keep over the bridge referred to, unless you finish at Victoria Station at something like 35 feet above the present rail level. It would be an impossibility, having regard to all the surroundings there, to get an approach for vehicular traffic to that station. If you take a low level it puts you back as far as Clapham Junction to get under the river, and then you would come in at the same level as the Metropolitan and District. But that is rather a gigantic thing to think about. I do think it is within the range of practical politics but that something of that sort may come. With regard to Waterloo Station, I am not here to make apologies for the engineer of that station, but it has been somewhat severely criticised. From the engineering point of view, I say it advisedly, I should be exceedingly proud if I were the engineer of that station. When it is finished, I believe it will be found to be from the railway practical working point of view an ideal station. I admit you will have to go those circuitous routes which have been mentioned, all round with the cabby; but I do not think he will mind; he knows his way round under the arches, and it will add an extra sixpence to his register. It is an excellent station, whereas before it was an abomination.

MR. WATERHOUSE, in reply, said: It is a surprise to me that my Paper should have been received with so much kindness, and particularly that I should have been let off so tenderly by our railway friends. I feel especially grateful to Mr. Morgan for the practical things he said to wind up this debate. He said how well it would be if we could work these things retrospectively, and I agree with him; but we should not lose hope. What I endeavoured to point out in the early part of the Paper was that, in order to make provision for unknown needs, the early pioneers played up to the period fifty years ahead of their day; they were prophetic to an extraordinary degree; and the spirit of prophecy need not be

considered to be dead even among engineers of the present day. Touching one or two points which have been raised: Mr. Lanchester pointed out that a roof like St. Pancras Station roof is out of scale with other things. In regard to that I would merely say that architects have to deal with big things; that a station is a big thing, and it must be taken as such. The difficulty of the large scale must be got over by us as the Romans would have got over it. Did I speak too warmly of Waterloo? Mr. Lanchester suggests that I did. I selected a few bright spots, and dwelt upon them, and I still have hope in the case of Waterloo—hope that my hopes will be fulfilled. As to the through-station scheme, I am unwilling to recognise the desirability of it. I cling to my privileges as an inhabitant of this Metropolitan City; one such privilege is that our trains actually start from here, and do not run through. I thank Mr. Potter also for his kind words and practical railway details. With regard to his remarks about a central goods station, I agree that centrality must be had in that case, as in the case of passengers, but I understand from those who are interested in the clearing-house scheme that the goods would be dealt with by mechanical sorting, which is not applicable, I presume, to passengers; at any rate, I do not propose to submit myself to mechanical sorting! Mr. Middleton has alluded to his well-known scheme for using high-level railways as roads. I had not forgotten that, but having many things to speak of I did not allude to it. I considerably condensed the latter part of my Paper in the reading, having found I had overwritten myself. Therefore, if anybody is interested in what I had to say, and will pay me the compliment of reading the Paper at home, I shall be very grateful. I am particularly interested in what Mr. Warren said about the Municipal side of the question of station approaches. It is very easy for us to be hard on the railway companies, to upbraid them for what we consider to be the ugliness of their work, which uglinesses are often economies in our own direct interests. We are apt to forget that in this country we are not living under a despotism, and that the Local Authorities are not our lords and masters, but our delegates. We should look to State and Municipal aid for the architectural beautifying of stations and their surroundings. I thank you very much for the way in which you have received my feeble attempt to deal with this enormous subject.

THE CHURCH OF ST. MARY, KING'S WALDEN, HERTS.

By WALTER MILLARD [A.]*



KING'S WALDEN CHURCH, HERTS.

FOR the latest published data concerning the historical development of this building we turn to the Inventory of the Historical Monuments in Hertfordshire, issued by the Royal Commission on Historical Monuments in England, and to the recently published Vol. III. of the Victoria History of the County of Herts, comprising the churches in the Hundred of Hitchin, in which this parish is included. By the light gained from these authorities we may proceed at once to read from the fabric itself something of the life-story of this edifice and to follow out approximately the course of development in the structure, from its earlier to later forms, arriving finally at the completed shape before us. This story is one of growth in the building, of a regular series of structural changes and expansions succeeding one another through century after century, a story which we may find paralleled more or less closely in most of our old churches. To an archaeological society I need not emphasise a primary fact so obvious as this long-continued course of growth in the fabric; but it may prove interesting to note the course of events in the

life of the building from first to last, to observe the ordered sequence of the several parts of the whole work, as by turn they came into place.

For a diagram to illustrate this I have measured-up and drawn-out to scale a ground plan of the building, indicating on it by various hatching the portions of walling apparently assignable to the different centuries during which building-work has gone on here. In the case of a structure such as this we must dismember and dissect it mentally, if we are to understand it; and a diagram may assist us in the operation.

The essential data given by the above-named authorities, as to the building-times of the several main portions of the edifice, may be summed up as follows: An aisleless church perhaps of the late eleventh or early twelfth century, now represented by the existing nave, had the arcades we view inserted in its side walls, with aisles built out beyond, about 1190. The existing chancel seems, in plan at least, to be of the thirteenth century, so it must replace an earlier one. About 1380 the west tower was built, and in the next century—the fifteenth—the clearstory was raised on the nave walls, involving a new roof undoubtedly, and the aisles were re-roofed much as

* Paper read at the Church before the East Herts Archaeological Society, 28th August 1913.

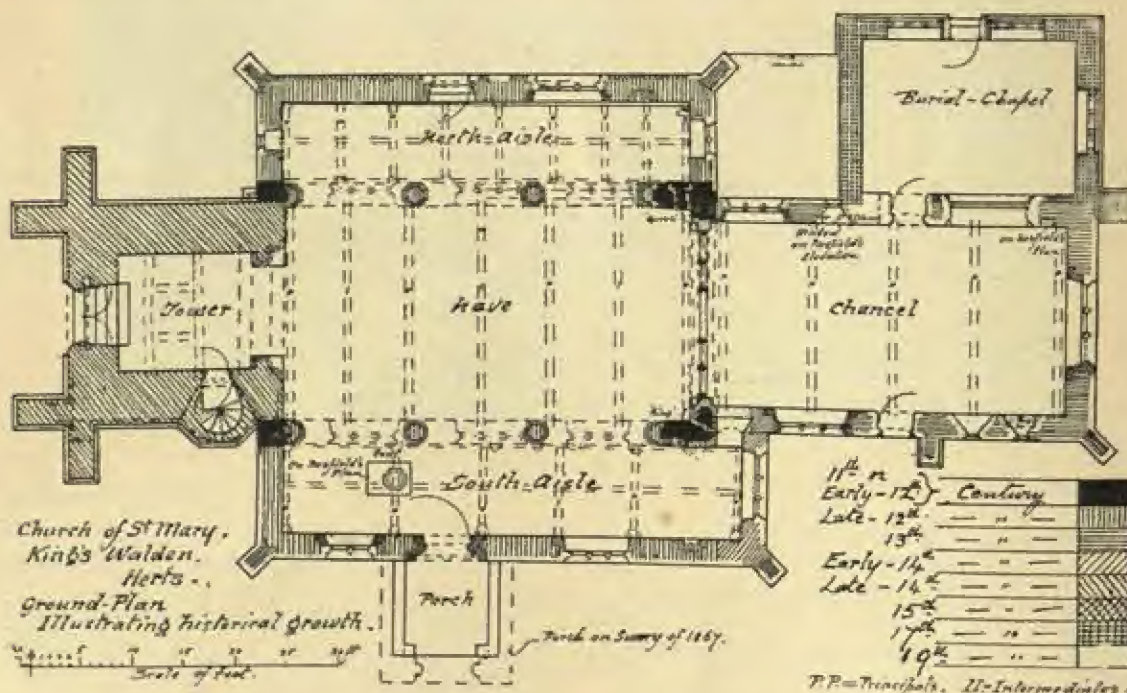
we see, on raised and largely rebuilt walls. In the seventeenth century the present vestry was erected, as a burial-chapel, on the north side of the chancel, whilst in the nineteenth century came the existing south porch, completing the plan as we have it to-day.

The significance of these bare particulars and the interest attaching to them become more evident as we trace out the work further in detail.

To take the nave arcades first; we must remember that the men who built these built them to fit the already standing nave of a church in daily use, a building that the parishioners could not dispense with even temporarily, there being no substitute for it. We may be pretty sure that, even to obtain a much-needed enlargement of their aisleless nave, they would not, if they could help it, proceed straightway to unroof this

the purpose, combining as it does strength for taking weight with greater convenience for the under-building of standing walling than would be given by a lower curve.

Evidence of these arcades being insertions in already existing walls is afforded by the respond-piers, especially those at the eastern end, and by the arches themselves. Clearly the wrought stonework of the half-columns, with their caps and bases, has been applied to the piers, not fitting them as it would if the work were all of one build, and thereby showing these piers to consist of pre-existing walling; whilst the outer ring, or order, of each arch-mould may be observed to vary here and there in its overhang beyond the inner or sub-order—that is, to deviate from a straight course on plan—according as it has had to be



and to pull down its side walls, stopping all use of the place for ever so long. Nor need they do so. They might keep it all standing, and in full use, whilst building-out aisles complete on either side; and then they could go on gradually to throw these aisles open to the nave by constructing arcades in the side walling piecemeal. Here ingenuity would come into play; but, one by one, the four columns, the four responds at the ends, and the six arches could be built up, in position, each in a special gap cut for it through the standing walling, as required for the new masonry to be bedded stone by stone. Thus, disturbing work might be reduced to a minimum by confining it to one point only at a time, where it could be screened off, the old material being removed by degrees. The arches are rather sharply pointed, a good form to adopt for

accommodated to take the older walling above it, whose face has not preserved a true plane, but winds somewhat, after the manner of old wall-faces. The two western responds lean outwards to the west, owing to an insufficient length of old walling in each instance having been left standing, in the form of a pier, to abut the thrust of the arcade at this end: the eastern responds having deeper piers left behind them, for the purpose perhaps of flanking the new aisle altars, remain upright. Indications of the western ends of these early side walls seem to be discernible externally on either side of the tower: and on the north side there remain, possibly still in position, some eight or nine courses of thin bricks, varying from about $1\frac{1}{2}$ inch to $1\frac{3}{4}$ inch in thickness (with $\frac{1}{2}$ -inch to $\frac{3}{4}$ -inch joints of tough mortar), which look not altogether

unlike Roman material re-used, and raise the suggestion that the aisleless nave might have had its angle-quoins so fashioned. Assuming the height of its side walls to be given approximately by the window-sill beds of the existing clearstory, at which level the internal wall-faces indicate a slight thinning of the walls, we may imagine roof-slopes of suitable pitch rising to an apex about as high as the existing ridge; and if, then, these slopes were just produced on downwards, when the aisles came to be added to the central body, the whole would appear as covered in by a single roof, like a barn, with low side walls to the aisles.

To complete the picture of this edifice towards the close of the twelfth century, when it had developed side-aisles, we have to add to it a chancel at the eastern end, remembering that, in fact, it must have had such a feature all along. As to the design of any earlier chancel than the existing one, there seems to be little clue; we can only feel certain that it was small in comparison with the existing structure, which appears to have come into existence within the first half of the thirteenth century, and must have been undertaken as a work of enlargement. Conceivably, it might have been built up beyond the side walls, as well as out beyond the east end, of the earlier chancel; at any rate, by eastward extension they could obtain a roofed-in sanctuary, to receive their altar, before the earlier east end need be pulled down, again minimising as far as possible interruption of services. Still, the earlier chancel arch would seem to have survived for a further fifty years or so, since the existing arch, judging from its moulded details, could hardly have taken shape till about the opening of the fourteenth century. It must have been the last stroke to the work of chancel enlargement. Replacing an arch of perhaps half its span, as an earlier arch might have been, this one was built as wide as could well be got into place. Its height would be governed by the chancel roof, the pitch of which is probably retained in the existing covering. Here, also, as in the case of the nave-arcade arches of some century earlier, the outer arch-rings, or orders, vary in their overhang beyond the sub-order, to fit up to pre-existing wall-faces above; which fact goes to show that, without a pulling down of the whole gable, this arch with its jambs must have been built-up, in the thickness of the standing walling, outside and over its predecessor, before this latter came to be cleared away. A good instance of such practice is to be seen in the tower arch of St. Mary's, Hitchin, a thirteenth-century example.

Along with this chancel arch here seems to go the rather singular passage-way through the walling, from the north-east corner of the south aisle to the south-west corner of the chancel. It looks as though this aisle had been lengthened eastward for the express purpose of gaining the way of communication; and the masonry of the arched opening from the aisle, with plain pointed head and chamfered edge, appears to agree with that of the chancel arch. Whether the original end-wall of this aisle

was actually removed out of the line of abutment to the chancel arch or not, it is a fact that a settlement has existed through the walling at this south-east angle of the nave, sufficiently serious to be prominently noted on the survey made in 1867, the effect apparently of the weak abutment on this side to the widened chancel arch.

Before the close of the fourteenth century the parish was able to pride itself on the possession of a real bell-tower, of size, in which to hang their peal, after having had to put up till then, most likely, with some sort of turret; such, for instance, as representations and descriptions show that the next parish, of Lilley, continued to make-do with down to within living memory. This King's Walden tower is distinguished by that indefinable yet unmistakable air of quiet stateliness peculiar to the English country church, a quality which can be felt, even through a mantle of ivy such as here prevails. The tower has had its side walls set out a little askew from its east wall, which, with its great arch, evidently takes the line of the old west wall of the early nave. The erection of this tower in itself must have tended to diminish light in the church, owing to its obliterating any former west window, for which the new window, some 18 feet further back from the nave, had to serve as compensation; and since the side walls of the aisles would still be remaining low, it seems probable that the gloom deepened. Aisle window-openings may have been enlarged to meet this; but no wonder that the next move made in the way of expansion of the fabric was to throw up a clearstory on the nave walls, as many another church was doing during the fifteenth century. This, of course, involved a new roof of low pitch, a leaded roof, with oak principals, whose two easternmost stone corbels, carved as King and Queen, yet remain in position. And the aisles, too, followed suit, with new roofs of low pitch, raising their walls in accordance and remodeling their window-heads, doorways and buttresses. To a great extent these aisle roofs survive, whilst the main roofs have been renewed.

We have only to try to imagine the church without its clearstory, and with low aisles, to realise that, compared with this earlier state, it had now become almost another building both internally and externally. To contribute to the general brightening-up of the interior during the fifteenth century they also put in the rood-screen, which still in greater part remains, though now lacking its crowning feature, the rood-loft, which overhung it towards the nave, as is indicated by the passage-way on to this loft, cut through the end of the north wall close up by the chancel arch.

Here it may be as well to note that the screen as it exists to-day stands at some 20 inches lower level than it seems to have been designed to stand in the chancel arch. This is on account of the floor of the nave having been by that much lowered, apparently

in modern days. The floors of the tower and north aisle have also been brought down to this depth, with the evident object of making the entire floor west of the chancel arch level with the threshold of the fifteenth-century main door of entrance into the south aisle. It looks as though from this south aisle floor up to the nave floor there must have been some steps, all along between the columns of the arcade, and perhaps in the same way again up from the nave level to the floor of the north aisle. That these floor-levels originally followed the fall of the site across the church, from north to south, is proved by the relative positions in the walls of doorsteps and piscinas on each side of the church. The chancel floor, too, appears to have run through level with that of the nave, at which height also the burial-chapel floor eventually came to be fixed.

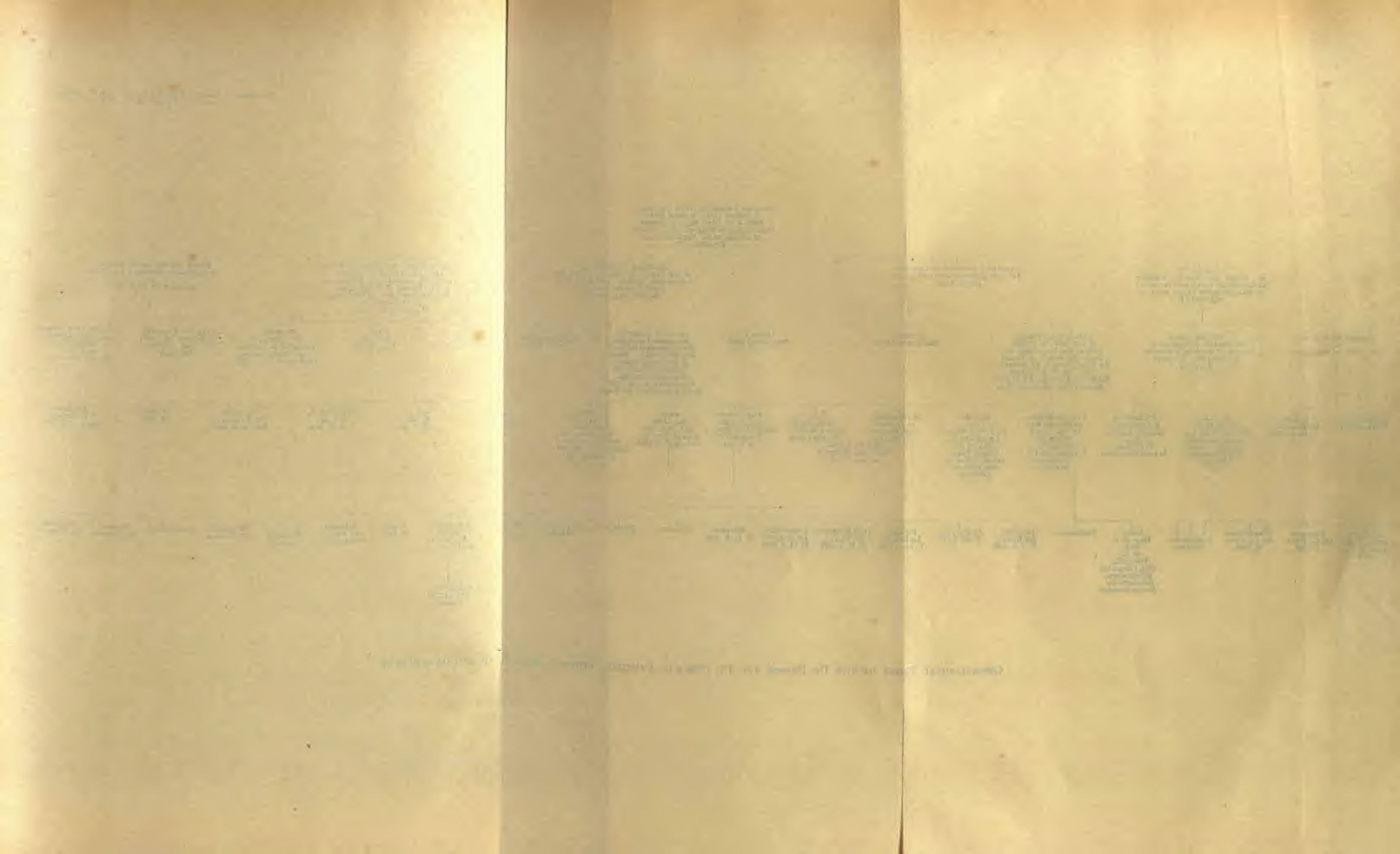
In the fifteenth century the chancel had most of its windows remodelled, including the east window; and by then this church fabric had developed to the fullest extent that it was destined to attain as a mediæval structure. Probably it already possessed a south porch; at any rate, one of rather larger dimensions, and with thicker walls than the existing porch, is figured on the survey made in 1867.

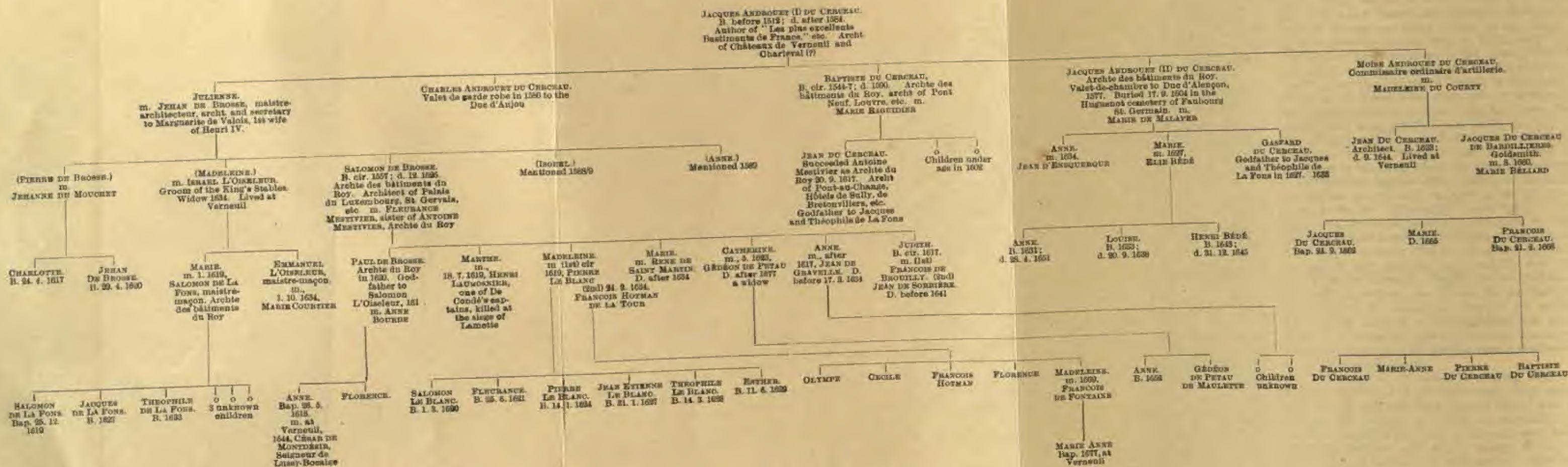
In the seventeenth century there was added on to the north wall of the chancel the burial-chapel of the Hale family, now utilised as a vestry. This building is by no means the least interesting piece of work about the church. With its walling of 2-inch red bricks, and windows oak-mullioned and cinquefoil-cusped in the heads, it echoes in a pleasant way of its own the work of an earlier day and seems to indicate, on the part of its designers, a yearning after the old times past. Whether it replaces any earlier structure, and whether the arched opening of modern stonework over a raised monument, in the wall between chancel and chapel, represents in any way a mediæval original, one can only surmise. The Herts Inventory and the Victoria History date this burial-chapel as an early seventeenth-century work. Chauncy, who lived not ten miles away, and published his History in 1700, states that Colonel Wm. Hale, who died in 1688, built the chapel as a burial-place for the family. Cussans says it was built about 1680 by Wm. Hale. One would like to hear on what grounds our latest authorities agree to differ by half a century or more from the older authorities.

In the nineteenth century this church, its tower and vestry excepted, underwent extensive reparation and renewal of features and wall-faces, under Mr. Eden Nesfield, as architect. He made the survey I have alluded to. His drawings are dated December, 1867, when the contract was signed, and the work was in progress the following year.

Now for a glance back at it all, viewing it as a picture, a moving-picture, dim at first but getting clearer as it moves on; we see standing on this actual site, in this Royal Manor once held by Harold, a mason-built church of simple form, just nave and chancel most probably, dating back whether to Harold's day or to some time subsequent we do not know—a church which, as these nave arcades themselves proclaim, at any rate called for enlargement and received aisles by about the year that Richard the Lion-hearted set out for the Holy Land. Then, within the next century, there comes into view a new chancel, an expansion of an earlier one into the size and shape of that we now have, a chancel presently thrown open to wider view from the nave by the construction of the existing chancel arch about the beginning of the following century. Again, before this fourteenth century is out, further growth of the fabric takes place, now at its western end, parish ambition to own a big bell-tower, like other places, being gratified near about the time of Wat Tyler's rebellion. Following this tower we witness a striking transformation from gloom to brightness in the nave, where, by upward expansion into a clearstory together with a raising of the aisles, the effect is marvellously changed, as though in response to the cry "More height: more light!" And along with the raised walls and new roofs we note this interior now receiving its finishing touch in the shape of a rood-screen with its loft above, on which we may be sure that the best available skill and care would be focussed. Finally, by the middle of the sixteenth century, we behold the spectacle of this church of the parish, this work of the parishioners, being stripped of its furnishing and plundered of its ornaments and its bequests, but nevertheless still retained by the parishioners in continuous use as their parish church.

If I have at all succeeded in making clear my narrative as to how it all came about, from beginning to end, you will have noticed that I aim at clearness by confining my efforts to accounting for the development of the fabric in its main parts only, neglecting features and details except so far as these weigh in evidence of development. Numbers of interesting points about this building might be noticed and discussed which I have left unnoticed, as being immaterial to my main argument, to say nothing of other points of view that might be taken of the whole thing. Associations religious, æsthetic, sentimental and romantic, all cluster round our old churches. The consideration of these aspects of the subject is beyond me, and I content myself with keeping to the humble and rather prosaic business of trying to understand and explain the building as an organic structure.





GENEALOGICAL TABLE OF THE DE BROUSSE AND DU CERCEAU FAMILIES (CHIEFLY FROM READ AND GEYMÜLLER).

SALOMON DE BROSSE AND HIS FAMILY.

By JOHN W. SIMPSON, I.Q. [F.].

IN 1838 the picturesque little "rue de Longpont" at Paris, immediately behind the ancient church of St. Gervais-St. Protais, where the monks of Longpont once possessed a hospice, was rebaptised "rue Jacques de Brosse" * in honour of the architect who designed the great Renaissance frontispiece of the church in 1616. The intention of the municipality was excellent, but its historical knowledge inadequate, since the architect's name was not Jacques, but Salomon! Their mistake was pardonable, for with a singular accord the historians of Paris from Malingre, his contemporary, and the inaccurate Brice onward, have dubbed him "Jacques." D'Argenville, who prided himself on his knowledge of art and artists, Félibien, Piganiol, the usually accurate Saugrain and Jaillet, Dulaure, men of weight like Blondel and De Gisors, the historian of the Luxembourg, even so modern a writer as the Marquis de Rochegude—who ought to have known better, since Normand had corrected the error in 1893, and Read's little monograph had been printed in the *Mémoires de la Société Nationale des Antiquaires* since 1881—all have, after the exasperating method of historical writers, gravely repeated one another's mistake, until collectors of autographs came to refuse the signature of "S. De Brosse" as not being authentic! The "*Figaro*," indeed, went a step further and canonised the imaginary Jacques, referring (22nd January 1877) to an event which had taken place in the "rue Saint-Jacques de Brosse"! Much may, however, be forgiven to journalism, and especially to French journalists, whose studies of past and present Paris form an important contribution to the history of the City. His surname was, of course, treated in the free and easy way common to our ancestors—orthography was almost the last thing to lose its freedom under the rule of pedantic democracy, and we find him described as Bros, Brousse, Bosse, frequently Desbrosses, occasionally La Brosse and De la Brosse, according to the more or less slippery pen or memory of the writer.

Salomon de Brosse, to give him his right Christian, or Israelitish, name and patronymic, was a Huguenot, one of "the Religion," as they were called in his time, and was born at Verneuil-sur-Oise, in the valley between the river Oise and the Hallate forest, a tiny commune at the foot of the hill overlooking the Seine basin on which the famous château was built by Henri IV. for Henriette d'Entragues.† It may be more readily identified nowadays as being some two miles north-east of Creil, the important modern station at the junction of five lines of railway, and about equidistant from the great châteaux of Chan-

tilly and Liancourt, to the south and north respectively, and the old town of Senlis to the east. At Verneuil was established during the later years of the sixteenth and the beginning of the seventeenth centuries, a notable colony of architects with Jacques Androuet (1) Du Cerceau at their head. All seem to have been Huguenots, a fact which, even in those embittered times, did not interfere with the free employment of their talent on both public and ecclesiastical buildings, or even, in some cases, with their holding Court appointments. The Du Cerceau, Mestivier, De La Fons, De Brosse, and Du Ry families were all more or less related by marriage, as may be seen by the rough genealogical table which I append, and their influence on the architecture of their time was paramount. De Brosse, with whom we are presently concerned, was actually engaged on the Palais du Luxembourg for the widowed Queen of Henri IV., the façade of St. Gervais-St. Protais, and the new church for the Capucin community at Coulommiers, at the time he built the Protestant "Temple" at Charenton; moreover, though the latter was burned down by the mob in 1621, popular feeling did not prevent him from continuing his work on the Arcueil aqueduct and elsewhere, a strong testimonial to his exceptional character and capacity. Of his personality, as of that of the other members of the great architect families above mentioned, very little is known; occasional glimpses of them occur in contemporary registers and other documents, but their works are in most cases their only biography. Berty,* Ch. Perrault,† D'Argenville,‡ Quatremère-de-Quincy,§ are silent as to the life of De Brosse, or mention him only to register their want of knowledge. Others give information which is obviously incorrect, stating the place of his birth as Paris, and the date of his death as 1632; they not only confound him with Guy De-la-Brosse, physician to Louis XIII., and Charles De Brosses (who lived under Louis XV.), but attribute to him works by Abraham Bosse, the engraver, published many years after Salomon's death! No portrait of him can be traced. His birthplace and the date and place of his burial are known from the registers of one of the little Protestant cemeteries of the Faubourg Saint-Germain, which occupied the site of what is now the west side of the rue des-Saints-Pères, opposite the Hôpital-de-la-Charité. The rough entry runs: "*Salomon de Brosse Nati de Verneuil ingenieur (architecte des bastimens du roy) a esté enterré le maircredi 9^e jour de décembre mil VC 26 assisté de deux archers du guet.*"||

He was a grandson of the famous Jacques (1) Androuet Du Cerceau, author of "*Les plus excellents bas-*

* *Les grands architectes Français de la Renaissance*, 1860.

† *Les hommes illustres de la France*, 1696.

‡ *Vies des fameux architectes*, 1788.

§ *Dictionnaire historique d'architecture*, 1832.

|| *Mémoires de la Société nationale des Antiquaires de France*, T. XLI; article by Ch. Read, Membre résident, to whom I have to express my indebtedness for many of my facts.

* Since 1881 it has been, with commendable caution, renamed as "rue De Brosse."

† Afterwards Marquise de Verneuil.

timents de France,"* whose daughter Julienne married Salomon's father, Jehan de Brosse, himself a "maître architecteur" as appears by a deed of purchase of 1568; he was probably born about 1560, and was certainly married in 1582. His wife was Fleurance Mestivier, sister of Antoine Mestivier, "architecte du Roy," who survived him (an act of sale by her in 1634 being extant), and they had seven children whose names are known; Paul, the only son, being cited as "officier des bastimens du Roy" during his father's lifetime. Paul's cousin, Marie l'Oiseleur, married Salomon de La-Fons, who continued the family tradition as "architecte-des-bastimens-du-Roy" under Louis XIII.

The De Brosse were folk of some wealth as well as position, the little domaine of Saint-Quentin came to Salomon from his father, and he is known to have also possessed the fief of Plessis-Pomeraye, near Verneuil, as well as the wood called "Largillière," in the Forêt de Hallate, through which runs the road to Senlis; he is referred to as "noble homme" in a deed signed by the Marquise de Verneuil, the usual legal designation for the commonalty being "sieur" or "honneste personne."

There is not much more known of Salomon de Brosse, head of his profession though he was, than I have set down here; but his descendants have been traced, and their names, with such dates as identify them, are given in the genealogy already referred to. The order of birth is in nearly every case conjectural, and where names are enclosed in brackets the actual relationship is not certain, but assumed from contemporary dates. There has been so much uncertainty and confusion about the relationship of the architect families of Verneuil-sur-Oise that I have thought it worth while to analyse and classify what has been discovered. The result is very far from final, and better antiquaries than myself will be able from time to time to add to and amend my statement. *Humani nihil*, everything is of interest which adds to our knowledge of our predecessors' lives, and I add my humble tribute to the memory of the greatest architect of his time.

CORRESPONDENCE.

The King Edward Memorial.

Whistlers Hollow, Woldingham, Surrey,
23rd February 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—As no such opportunity for a symbolical and historical memorial has occurred in our time, may I urge the claims of the Mall Entrance as a site for the King Edward Memorial?

The altered circumstances in regard to the Mall

Entrance force our attention on it as a site. Now that a dignified approach from Trafalgar Square is to be provided by the co-operation of the Government with the London County Council and the Westminster City Council, surely the outstanding claims of this position may be now definitely considered as a worthy site for an Emperor's Memorial.

It is impossible to add anything material to the words of Lord Curzon in the accompanying letter to the *British Architect*. But I will venture to affirm that should His Majesty the King be pleased to signify his approval of the Mall site an overwhelming verdict of public opinion will follow in its favour. Professional opinion is already largely on the side of my plea, and I have good reason to believe that the only professional opinion on the Memorial Committee was largely biassed in the same direction.—I am, yours faithfully,

T. RAFFLES DAVISON [*Hon. A.*].

Lord Curzon, in the letter referred to by Mr. Raffles Davison, says:—

"I have never yet expressed an opinion on the site of the projected statue of King Edward, partly because I could not feel that I had any claim, except that of a subscriber, to be heard, partly because I believed the matter to have been settled, though in deference to what considerations, I do not know.

"Since, however, you ask my views, I have no hesitation in replying that I would greatly have preferred to see the statue of King Edward placed at the opposite end of the Mall to Buckingham Palace. In such a position the illustrious son at one end would have faced his even more illustrious mother at the other, fitly symbolising the beginning and ending of the Victorian era. Moreover, the new avenue, constructed in memory of the one, and during the reign of the other, would thus have been consecrated in its entirety to their joint memory.

"I have walked down on many occasions to the eastern end of the Mall, and, inasmuch as the monument of King Edward is, I understand, now to take the form of an equestrian statue, wondered whether it could not be placed there in a central position, as the end of the long vista.

"An alternative position would be in the circular space at the Charing Cross side of the archway, but this site, though feasible, would apparently to some extent be shut in, and the King's memorial would, so to speak, be severed from connection with that of his mother.

"As a member of the Athenæum Club, I shall, doubtless, often regard with loyal pleasure the figure of King Edward VII., by Mr. Mackennal, which, I am told, is to take the place of the present statue of Lord Napier of Magdala. But I cannot pretend to regard the site with the slightest enthusiasm, since, if the metaphor may be permitted, it is a backwater, separated from the main tide and current of London life."

* No fewer than 11 plates are devoted to the "Château de Verneuil."

The Repair of Ancient Buildings.

*The Society for the Protection of Ancient Buildings,
20, Buckingham Street, Adelphi: 18 Feb. 1914.*

To the Editor, JOURNAL R.I.B.A.,—

SIR,—I should be grateful if you would allow me space to express the general view of the Society for the Protection of Ancient Buildings toward the interesting Paper by Mr. Forsyth on the 15th December last.

It seems from the discussion that all are agreed that the main principle in the repair of an ancient building is to preserve its historic and architectural interest unimpaired, so that it may tell afterwards everything that it could tell before; and at the same time the repair should not only be permanent in itself, but should also render the building permanent. Now, to effect this last point, it may be necessary to deface the interest of architectural detail, or to obliterate the mellowing effect of time. The difficulty therefore before us is the nice adjustment of these conflicting claims.

The permanent repair of a building cannot be effected, however, without renewal of some portion of its material; but as each part renewed reduces the historic value of the old work, it is only as a last resort that such renewal should be undertaken. There are, and it is likely there will always be, differences of opinion as to when this last resort should be exercised, but these differences cannot be serious if the main principle be constantly adhered to.

It is hoped that, before long, stone preservatives will be found having a more lasting effect than those now in use. It is clearly, then, the duty of architects at present to check this decay of stone rather than to renew the material, except where, for structural reasons, the renewal is necessary.

Not only is restraint important in the matter of inserting new materials, but it also needs fine judgment to choose suitable materials. An open mind is essential to success in this difficulty, as no rule can be made to suit all cases.

Nearly all sound building materials are of use according to circumstances. For the repair of stone the most serviceable are stone, brick, and tile. Stone has the disadvantage that most kinds are readily susceptible to the attacks of smoke and weather, and so liable to decay. Well fired and well-made tiles are known to be nearly indestructible under these conditions, while in some circumstances many other advantages are gained by their use.

The essential point, however, which should be continually before the mind of one who has an ancient building under his care, is that repair work must not be lightly undertaken.

The repair of valuable ancient buildings is perhaps the most difficult branch of architecture, and the principle to be aimed at is surely: To preserve to a building its intrinsic form and colour, and its particular quality of surface and tone.

I remain, Sir, your obedient servant,

A. R. POWYS, *Secretary.*

R.I.B.A. General Meetings.

Rushlip: 25 Feb. 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Have those responsible for the General Meetings of the Institute considered the advisability of Papers being printed in the JOURNAL before instead of after the meetings? This method might not be suitable for all lecturers or for all subjects, but it would often be advantageous. At present, lecturers frequently find the time at their disposal too short, and by the time a few specialist visitors and a few recognised habitués have spoken, it is time to think of trains. The subject is thus sometimes merely skimmed over.

If the Papers were printed first and the Meeting opened with discussion, the audience would, I think, be larger and not smaller, because several would come with the idea of criticising, refuting, or supporting what had been published. The debate would be more considered and fuller. The writer of the Paper would have been able to express himself more completely, and his personality would find scope in a reply which might last from 9.15 to 9.45 p.m. Hoping that some such an arrangement may be tried next session.

I am, Sir, etc.,

F. HERBERT MANSFORD, *Licentiate.*

THE EXAMINATIONS.**The Final: Testimonies of Study.**

The attention of Students preparing for the Final Examination is called to an error in the announcement under the above heading in the last issue of the JOURNAL, the words "one of" having been omitted from the penultimate line. The resolution of the Board of Architectural Education is in the following terms: "That Students may submit, in lieu of one of the alternative problems, designs made by them in a recognised School of Architecture."

Architectural Pupils: Notice to Members and Licentiates.

The Council desire to suggest that intending pupils and students should be informed that they will find it extremely desirable, if not essential, to prepare for and pass the Preliminary or a similar Examination before entering architects' offices.

COMPETITIONS.**The Barnsley Townhall Competition.**

Members and Licentiates of the Royal Institute of British Architects must not take part in the above competition, because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

By order of the Council,

IAN MACALISTER, *Secretary.*



9 CONDUIT STREET, LONDON, W., 28 Feb. 1914.

CHRONICLE.

R.I.B.A. Prize Drawings for Exhibition in the Provinces.

The following selection from the premiated designs and drawings in the Institute Prize Competitions will be exhibited during the next few months under the auspices of the Allied Societies:—

Royal Institute Silver Medal (Measured Drawings).—Drawings of San Pietro, Montorio, Rome (4 strainers), by Mr. James Bennett (under motto "Rags"), awarded the Silver Medal and £10 10s.

Soane Medallion.—Designs for an Official Country Residence for a Royal Personage in the United Kingdom: 4 strainers by Mr. H. Chalton Bradshaw (under motto "Farnesina"), awarded a Certificate of Hon. Mention and £10 10s.; 2 strainers by Mr. Gordon S. Keesing (under motto "Akarana"), and 2 strainers by Mr. Thomas Chalkley (under motto "Anchor"), each awarded a Certificate of Hon. Mention.

Pugin Studentship.—Drawings by Mr. W. Cecil Young (2 strainers), awarded the Medal and £40; drawings by Mr. Julian B. Leathart (2 strainers), awarded a Certificate of Hon. Mention.

The Tite Prize.—Designs for an Imaginative Composition in Perspective in the Italian Style for an Important Fountain: 2 strainers by Mr. Trenwith Wills (under motto "Golden Dolphin"), awarded the Tite Certificate and £30; 2 strainers by Mr. Arthur G. Shoosmith (under motto "Panama"), awarded Certificate of Hon. Mention and £10 10s.

The Grissell Prize.—Designs for a Four-Storey Dockside Warehouse: 2 strainers by Mr. Philip D. Bennett (under motto "Syrod"), awarded the Grissell Gold Medal and £10 10s.

The Arthur Cates Prize.—Drawings by Mr. J. C. Rogers (3 strainers), awarded the Arthur Cates prize of £42.

Tenth International Congress of Architects, St. Petersburg, 1915.

The Tenth International Congress of Architects will be held at St. Petersburg in the spring of 1915.

The preliminary programme of subjects for discussion is as follows:—

- (1) The Responsibilities of Architects.
- (2) Architects' Schedules of Remuneration.
- (3) The Appointment of Official Architects to Government and Municipal Departments.
- (4) Copyright as affecting Architects.
- (5) Women as Architects.
- (6) The Duties and Privileges of the Architects' Profession.
- (7) National and International Public Competitions and the Position of an Architect placed first in an International Competition or entrusted with Work in a Foreign Country.
- (8) The "Stadtbauordnung," or Regulations affecting Building Construction applicable to the Respective Zones or Districts of a Town.
- (9) Cheap Dwellings.
- (10) National Characteristics in Architecture.
- (11) The Evolution of the Theatre during the last twenty years.
- (12) The Preservation of Historical Monuments, and its Compatibility with the Economic, Hygienic, and Social Requirements of Towns.
- (13) An Exhibition of Plans and Models of Modern Theatres.
- (14) An Exhibition of Ancient Russian Architecture.

Of the foregoing proposals, Nos. 13 and 14 have been definitely accepted, and intending exhibitors in this country are requested to communicate as soon as convenient with Mr. John W. Simpson, Secretary of the Permanent Committee and of the British Section, at No. 9, Conduit Street, W. Observations and suggestions which may reach him with reference to the other matters for discussion will be considered by the British Section with a view to their definite adoption by the International Committee at its Assembly in May next.

Mr. Simpson will be glad to hear from British architects who may wish to contribute Papers on any of the subjects above mentioned. It should be borne in mind that the official language is French, and that if the original Paper (which may be in English) is accompanied by a French translation, it obtains wider notice and attention than if written in another language only. Arrangements will be made for the reading or presentation of Papers by architects who may be prevented from attending the Congress themselves.

The Right Appreciation of Architecture.

In an admirable leader inspired by the President's last Address to Students [JOURNAL, 14th February], *The Times* of the 14th inst. puts before its readers some elementary truths which, familiar as they now are to architects, need to be driven well home in the lay mind if architecture is ever to be rightly appreciated by those who are at once the judges and the employers of architects. Quoting the President's remark that architects have learnt to think in terms

of architecture, and that they no longer take up a style like a new coat, *The Times* says :—

Yet to the great mass of the public who take an interest in architecture at all, a style is still a system of ornament. Gothic means pinnacles and crockets and traceried windows, and Renaissance means pilasters, and Corinthian or Ionic, at the present moment especially Ionic, capitals. One man likes Gothic because of its associations, and another likes Renaissance for the same reason. Now to think in terms of architecture is to be aware that architecture is an art of use, and to judge every building in the first place by the manner in which it performs its particular function. It is to put yourself imaginatively in the position of whose who inhabit or use the building and to ask yourself whether it is convenient for their use or occupation. . . . A building must first be designed to fulfil its function; indeed, its use is to it what sense is to words; and, as beauty in literature is only a heightening of the sense of words, so beauty in architecture is only a heightening of functional design and should never be considered apart from that design.

Nearly all objects of use, buildings included, when they are well made of good material and when they are well adapted to their use, have a beauty of their own, which we may call natural rather than artistic, because it has not been aimed at by the maker but is rather a by-product of his good workmanship. But it is not in human nature to be content with this natural beauty of function. The designer recognises it, as he recognises the beauty of a tree or a fine animal; and, having recognised it, he proceeds to heighten it consciously in his next design. It is at this point that he becomes an artist; and all great and living styles of architecture have grown with this conscious heightening of the natural beauty of buildings well designed for their use. The style develops an ornament of its own; but it is able to do that only because it is mainly concerned with structure, just as a poet can only produce his own images when he is mainly concerned with his sense. If he thinks of his images first he will make verses rather than poetry; and if the architect thinks of ornament before use, his building may have a number of architectural features, but it will not be architecture. Thus the great mistake made by the Gothic revivalists of the last century was to think that architecture meant architectural features. They did not understand that Gothic was a style that had grown in the solution of certain structural problems and in the conscious heightening of the natural beauty of buildings in which those problems were well solved. For them there was no structural problem in Gothic, and they could no more revive it than we can revive a dead man.

Mr. Blomfield said that, in his experience, the features of Gothic were not well suited to modern conditions. We can well believe this; for Gothic, in all its main features, was a style developed in the solution of one great structural problem peculiar to the Middle Ages. It was, in fact, essentially a religious style; and the better it was adapted to secular purposes the less Gothic it became. What is most admirable in the secular buildings of the Middle Ages is not their Gothic features, which, indeed, are sometimes rather irrelevant ornament, but the qualities they have in common with all good building, qualities which prevailed in the Middle Ages, not because their style was Gothic, but because they were a time of great architecture. We may be sure that a medieval builder did not try to adapt the Gothic style to a secular building. He merely tried to make the best building he could for its particular purpose, and it was only in the decline of Gothic that the features which we think of as peculiarly Gothic were lavishly applied to secular architecture. Indeed, Renaissance prevailed because Gothic had become irrational. Renaissance, whatever its defects, was a style in all its features better suited than Gothic to important secular buildings just because it is a style developed in the solution of secular problems. It was a style that revived the prose of the Romans for purposes to which the exalted poetry of the Gothic was not fitted. Yet we must remember that prose has its platitudes just as poetry has its unreason, and there is a natural prejudice

against the Renaissance style because, as commonly practised, it seems to consist mainly of platitudinous features. The pilaster, for instance, is not so flagrantly absurd when applied to a hotel or a Government office as the pinnacle, but it is fatally easy to make an architectural show with pilasters, to use them as a substitute for architectural thinking. The Romans spoilt many a fine building with them, and they are now a vicious trick of design into which architects fall as bad writers fall into tricks of speech. Let us have Renaissance rather than Gothic by all means; but let it be Renaissance without pilasters, so that our architects may prove that Renaissance does not mean to them merely a stock of platitudes, but a method of building which is their own natural solution of the structural problems they have to solve.

The Preservation of St. Paul's: Appeal for £70,000.

The Dean and Chapter of St. Paul's Cathedral, with the concurrence and support of the Archbishop of Canterbury, the Bishop of London, and the Lord Mayor, appeal to the public for £70,000 to enable them to fulfil their duty of maintaining adequately the upkeep and permanent security of the Cathedral. The money is to be spent on the fabric only, and the question of the foundations is reserved for future consideration.

The Dean and Chapter state in their appeal that during the past 15 months the building has been the subject of a special inquiry, in which Mr. Mervyn Macartney, the surveyor to the fabric, has had the advantage of frequent consultation with Sir Francis Fox, Mr. W. D. Caroe, F.S.A., Mr. R. C. G. Davison, and Mr. Horace Darwin, F.R.S. Hitherto works of repair on the structure have been executed in a somewhat piecemeal fashion by funds raised from time to time when needs became urgent. Such methods are inadequate and unsatisfactory, and it is unanimously felt that steps must at once be taken to carry out a comprehensive scheme for the permanent strengthening of the fabric where it has been disturbed by foundational movements or by the great stress of the weight of the dome. The work now suggested will include the insertion of new stone, cement grouting (wherever it may be possible and expedient), and the removal of the iron which was used by Sir Christopher Wren in considerable quantities and which is the source of serious and increasing mischief to the masonry.

The Dean and Chapter have to face a constant anxiety lest underground buildings or sewerage should affect the subsoil and endanger the Cathedral; and it is the strong conviction of all their expert advisers that no work whatever that may be undertaken on the fabric will ensure its safety if any tunnelling be permitted in its vicinity. They are further informed that the strengthening of the superstructure must be completed, or approaching completion, before anything could be done to the foundations. They think it advisable, therefore, without further delay to issue this appeal for the fabric only, and to defer the question of the foundations, in regard to which unfinished experiments are now being made, for future consideration.

The work now contemplated will take several years

to finish, and the Dean and Chapter consider it their duty to make an earnest appeal for the sum of £70,000 towards carrying it out. Contributions may be sent to the Receiver, at the Chapter House, St. Paul's Churchyard, E.C., or may be paid into Messrs. Hoare's Bank, Fleet Street, E.C.

Suggested Site for National Memorial to Drake.

The first action of the National Committee which was established some months ago to secure a memorial to Drake was to appoint an executive committee to take steps to obtain a suitable site for the memorial in London. Colonel Clifford, deputy chairman, in a letter to *The Times* states that the sub-committee appointed to interview those authorities who were in a position to assist in the matter have been unable to make any substantial advance in this direction. Opportunities have been offered which would enable them to put up a statue to Drake, but as such a memorial as this does not fulfil the views of the Committee, the offers could not be entertained. The Committee themselves, says Colonel Clifford, favour a site which offers at once a magnificent opportunity for erecting the memorial worthy of the man, and at the same time adding beauty and interest to a spot which at present is more or less neglected, viz., the space which, though flagged, is practically unoccupied at the head of the Serpentine, between the pumping station and the water. Here the Committee consider is an opportunity for the artist and the surveyor to combine in a sympathetic movement to add another beauty spot to London, which would fittingly commemorate the illustrious dead, would teach the lesson of the Great Armada, and bring home to the present and future generations that now, as then, the safety of the Empire depends upon the command of the sea.

No. 75 Dean Street.

The text of the Bill which Earl Beauchamp has introduced into the House of Lords for the preservation of No. 75 Dean Street, Soho, is now published. It will be remembered that this interesting Georgian house was saved from destruction by a preservation order issued by the Commissioners of Works on 16th January, under the authority of the Ancient Monuments Consolidation and Amendment Act, 1913. The Bill has been introduced in accordance with a provision of the Act requiring the confirmation of the order by Parliament within eighteen months.

Proposed Ministry of Art.

At a meeting of the general committee which has been considering the question of the advisability of forming a Ministry of Art, held at the R.I.B.A. Galleries, No. 9 Conduit Street, on the 17th inst., a scheme prepared by an executive committee was discussed, and, with small alterations, adopted. Among those present were: Mr. Reginald Blomfield, R.A., Sir Thomas Brock, R.A., Mr. W. R. Colton, A.R.A., Mr. A. S. Cope, R.A., Mr. E. Guy Dawber, Sir George

Frampton, R.A., Mr. H. V. Lanchester, Mr. David Murray, R.A., Sir Frank Short, A.R.A., Mr. Solomon J. Solomon, R.A., Mr. H. H. Statham, Mr. W. Reynolds Stephens, Sir Aston Webb, R.A., and Mr. Herbert W. Wills.

The scheme proposes the setting up of a Ministry of Art, and it is intended to lay it before the Government as a basis for the formation of such a Ministry, the need of some such Ministry being, it is believed, generally felt. It is understood that the suggestion is that there should be a Minister at its head with a permanent secretary and a standing advisory Council of some 18 members, a certain number of members retiring each year in rotation. The members should be recognised authorities in architecture, painting, and sculpture, also in industrial design and museums, and include one antiquary, dramatist, musician, and literary man, with *ex officio* representatives of the official departments concerned. The duties of this Council would be to advise the Minister on all points pertaining to his department, which would include the advising on all æsthetic matters of public interest and legislation affecting the same; it would deal with National Museums and galleries, modern national art, industrial art, the laying out and changes in cities, streets, public buildings, parks, &c., the preservation and the amenities of towns, villages, and countryside, and the acquisition and preservation of national art treasures. This Council, it is suggested, should advise and be at the disposal of all departments of the Government on any matters on which trained artistic advice is required, and it is thought that there are many subjects continuously under consideration when such advice and guidance would be welcomed. It is also intended that the Council should, through the Minister, tender advice in matters that appear to require it.

Sanatorium Building: Local Government Board Memorandum.

The Local Government Board have issued a Memorandum prepared by their architect, Mr. Brook Kitchin, and medical officer, Dr. Newsholme, with a view to affording local authorities and others further assistance in the provision of special residential institutions in connection with permanent schemes for the treatment of pulmonary tuberculosis. The document supplements the Memorandum dated 25th February 1913, which showed in a general way how inexpensive sanatorium accommodation could be provided within a comparatively short period in order to meet any pressing need. The unit taken has been 100 beds in buildings, with 10 additional beds in shelters.

Dealing with the selection of a site, it is advised that this should be sufficiently large to permit of open-air employment of a considerable number of patients. If land is available at a low cost, it is desirable that a site of 50 acres should be provided for 100 patients, but 20 acres may suffice for 100

patients where land is difficult to obtain or its cost high. In all cases at least one-fifth of an acre per patient should be allowed.

The plan of the building depending on the stage of disease of the patients to be admitted, the cases to be accommodated are classified into groups as follows: (A) cases in which permanent improvement or recovery may usually be anticipated; (B) cases in which only temporary, though possibly prolonged, improvement may be anticipated; (C) advanced cases requiring continuous medical care and nursing; (D) cases requiring special observation.

The sleeping accommodation provided for patients is commonly of one or more of the following types: (1) Single-bedded rooms, for patients requiring a considerable amount of nursing; (2) two-bedded rooms, suitable for all types of patients except those just referred to; (3) beds on both sides of a ward as in the ordinary isolation hospital; (4) shelters, single- or double-bedded, suitable for patients in groups A and B, who are able to be up and about all day.

Accompanying the Memorandum are the following plans: (a) Block plan of a 100-bed sanatorium with three separate pavilions; (b) Block plan of a 100-bed sanatorium with a single pavilion; (c) Ground plan of Staff Block; (d) First-floor of Staff Block; (e) Plan of Dining-hall and Kitchen Block; (f) Plan of Nursing Pavilion for 36 beds; (g) Plan of Convalescent Pavilion for 32 beds; (h) Plan of two-storied Pavilion for 100 beds; (i) Plan of two-storied Pavilion for 100 beds (alternative design).

The accommodation should be so arranged that a floor-space of at least 64 square feet will be available for each patient; the distance between the centres of the heads of any two adjoining beds should not be less than eight feet measured along the wall behind the heads of the beds. Patients' rooms should not be less than 8 feet 6 inches high; wards should be higher, but may be carried partly into the roof and ventilated by openings in the gable end. Doors should be made on the "stable-door" pattern, so that in inclement weather the lower portion may be closed while the upper portion is left open. They should be constructed in the form of French casements with a clear opening of not less than 3 feet 6 inches, so that beds may easily be wheeled through them. Windows should preferably be of the casement pattern and be hung "to fold" without mullions. Baths should be provided on a scale of about one to twelve patients, and w.c.'s on the same scale. Spray baths may also be provided. If verandah accommodation is not adequate, day shelters, which should be of inexpensive construction, will be needed.

In view of the importance of continuous open-air treatment, patients should not be encouraged to collect in a recreation room, except for a very limited time or on special occasions: it is therefore suggested that the dining-room would suffice for purposes of recreation, lectures, etc. It will usually be unnecessary to heat the patients' quarters excepting the

dining-hall and some of the rooms for patients requiring special nursing, and a system of low-pressure hot-water heating will be found most economical for this purpose. Electric lighting should be employed where electric current is available or can be economically produced. Where, owing to local circumstances, the use of brickwork would be economical, cheap bricks may often be employed faced externally, if necessary, with rough-cast or cement. Walls in exposed positions should be of hollow construction. In some districts other materials may be less expensive and may be employed, such as steel framing carrying terra-cotta slabs, or concrete slabs or blocks plastered internally and cemented externally, or timber framing lined internally with asbestos sheeting or expanded metal lathing plastered with a hard setting plaster, rough-cast or coated externally with weatherboarding chemically treated.

Consumption Hospitals: Some American Ideas.

A unique tuberculosis sanatorium is to be constructed at Collinsville, Missouri. The building, all on one floor, is to be composed of private rooms and separate suites, luxuriously furnished, but with partition walls reaching only 6½ feet high. A single high roof, covering all the apartments, will leave several feet in the clear, through which fresh air may circulate freely. Ventilation is to be had exclusively in this clear upper space. Dr. M. W. Harrison, who is erecting and will conduct this hospital, has had a tent colony for consumptives for several years.

Dr. Marcus Heyman, superintendent of the tuberculosis department of the Central Islip Hospital, Long Island, New York, advising a committee that conferred with him concerning the character of architecture for a new tuberculosis hospital, said: "My notion of an appropriate hospital for the handling of tuberculosis cases is an inexpensive frame building which can be burned to the ground every six or seven years. Fire is the only means by which the germs can be routed out of a building housing consumptives. If it were possible to expose every corner of the building to the rays of the sun, the question would be solved, but this cannot be done. If built practically, a tuberculosis hospital should be a very inexpensive affair. A frame structure is suitable, because there is no heating problem to solve."

The French Law for the Preservation of Ancient Monuments.

A Parliamentary Paper [Miscellaneous, No. 1 (1914): Cd. 7151] has just been issued giving the laws in force in Hungary and France for the preservation of ancient monuments. That for Hungary, the Law XXXIX. of the Year 1881, has been described by Prof. G. Baldwin Brown.* The French Law was only promulgated on 31st December 1913, and is the one under which the recent steps were taken in connection with the priory at Villesalem in the Vienne. It affords an interesting

* *The Care of Ancient Monuments*, p. 167.

comparison with the present English Act, passed a few months before it, showing as it does how far behind we are on the broad principle of the right of a nation to protect its historic and artistic treasures. The administrative details of the French Law will depend on a future regulation, but the law itself illustrates a greater bureaucratic control than has been found necessary as yet for the protection of monuments in England. "By the order" or "with the consent" of the Minister of Fine Arts occurs in nearly every article. In contradistinction to the English Act, no attempt is made to limit the scope of the French Law by defining the term "monument." Anything movable or immovable may be scheduled. Immovable scheduled objects include all properties already scheduled, megaliths, land containing prehistoric sites or deposits, buildings that require to be scheduled in order to isolate, disencumber, or sanitize a property scheduled or proposed to be scheduled, and public or private property scheduled by an order of the Minister of Fine Arts with the consent of the owner, or, failing his consent, by a decree of the Council of State. The notification of the proposal to schedule a property has the same effect as scheduling. A private owner can arrange conditions under which his property is scheduled, but he may be over-riden by the decree of the Council of State. The scheduling of his property may involve the payment of compensation. Power is given to the Minister of Fine Arts, to Departments and Communes, to expropriate scheduled property or property proposed to be scheduled, and in these cases public benefit shall be declared by a decree of the Council of State. When public benefit has been declared the property may be scheduled without any further formality. A private owner must acquaint the person who acquires the property of the fact that it is scheduled, and the Minister of Fine Arts of the change of ownership; change of ownership, however, does not alter the effects of scheduling. These are, among others, that the property may not be destroyed or moved, nor may it be restored, repaired, or altered without the consent of the Minister of Fine Arts, nor may these works be carried out without the supervision of the Department of Fine Arts; that works indispensable for preservation may be carried out by the Department at the expense of the State; that failing amicable agreement with the owner the temporary occupation of the property for not more than six months may be authorised in the case of urgent works, and that no new building may be erected against scheduled property without the consent of the Minister of Fine Arts. A supplementary list is to be made of all buildings or parts of buildings which do not justify a demand that they should be scheduled. Inclusion in this list imposes on the owner the obligation of giving the prefecture fifteen days' notice of any alteration. Chapter II. deals with movable objects, whether movable in the true sense of the word or only as regards use, and Chapter III. with certain administrative matters. Under Chapter IV. the discovery

of finds while excavating must be reported immediately, and the Minister of Fine Arts may require the expropriation of the land on the ground of public expediency. Chapter V. deals with penalties. The heaviest, a fine up to £400 with or without imprisonment up to three months, is reserved for the alienation or exportation of scheduled movable objects, and this is without prejudice to actions for damages. The alteration of scheduled property may lead to a fine of £60 in addition to damages. The last chapter arranges for the extension of the law to Algeria and the colonies, for the determination, after consultation with the Commission of Historic Monuments, of the details of the application of the law, and for the repeal of previous statutes. The effect of this law on the preservation of ancient monuments will depend, as with the English Act, on how the schedules are drawn up, on the energy with which it is administered, and on public opinion and interest.

W. J. DAVIES [A.].

The Replanning of Athens.

Mr. Thomas H. Mawson [*Hon. A.*] has been commissioned, on the personal recommendation of the King and Queen of the Hellenes, to prepare comprehensive plans for the extension, remodelling, and beautification of the city of Athens. The city is growing in population at a rapid rate, and the replanning will make allowance for any extension of the city's boundaries which is likely to be needed during the next half-century. In Mr. Mawson's plans provision will be made for a great new railway station to supersede all the existing termini, and also for the new Law Courts and other official buildings, new hotels, new boulevards, including a broad avenue from the city to the Piræus, and a complete park and playground system. New waterworks are also contemplated, while the replanning will also have to take into account a rehousing scheme, which will be rendered necessary by the clearing away of the hovels which have accumulated in the course of time around the base of the Acropolis.

MINUTES. VIII.

At the Eighth General Meeting (Ordinary) of the Session 1913-14, held Monday, 23rd February 1914, at 8 p.m.—Present: Mr. Ernest Newton, A.R.A., *Vice-President*, in the Chair; 14 Fellows (including 5 members of the Council), 23 Associates (including one member of the Council), 14 Licentiates, and several visitors: The Minutes of the Meeting held 9th February 1914, having been published in the JOURNAL, were taken as read and signed as correct.

The Hon. Secretary announced the decease of James Hine, of Plymouth, elected *Fellow* in 1864 and transferred to the list of *Retired Fellows* in 1907; and of Ernest Barracrough Crossley, of Nottingham, *Associate*, elected in 1907.

John Henry Cossar, *Licentiate*, attending for the first time since his election was formally admitted by the Chairman.

Mr. Paul Waterhouse [F.] having read a paper entitled "LONDON RAILWAY STATIONS," and illustrated it by lantern slides, a discussion ensued and a vote of thanks was passed to the author by acclamation.

The proceedings closed at 10 o'clock.



Cathedral of Amiens Gate of the Golden Virgin.

THE QUEST OF BEAUTY.

By ARTHUR S. DIXON, M.A. Oxon. [F.]

Read before the Manchester Society of Architects, 28th January 1914.

I FEAR the title of my Paper is rather out of date and no less out of fashion. It savours of past times: of the Victorian age, of the early days of the Grosvenor Gallery—of the old Grosvenor Gallery on the west side of Bond Street—of the days when we still thought beauty was attainable—when we thought it was worth attaining.

It is a different world now; whatever we are for the moment in quest of, it is surely no longer beauty. It would almost seem that the days have come when we have no pleasure in them. But if the world is not as agreeable a place as it was, it is at any rate extraordinarily interesting, and things are happening every day which, if they had been prophesied thirty or forty years ago, we should have called unthinkable. Things have taken a turn (I am speaking of the world of Art) which is the very opposite of what we should then have expected. To eyes which were once delighted by the romantic visions of Burne-Jones, the strange and haunting graces of Rossetti, the sturdy wholesome optimism of Madox Brown, Gauguin and Van Gog and their like are—what shall I say?—cataclysmic phenomena. An English Rip Van Winkle returning to London after thirty years might well be startled into thinking that the end and final corruption of our civilisation was drawing near.

Post-Impressionism and Futurism are, of course, only little episodes of our civilisation, and they seem to be beginning to pass away, though it will be some time before we know how deep or how shallow their effects have been. In any case it is remarkable that they should ever have been tolerated by a country which produced the great landscape school of the first half of the last century, and which in its latter half saw the rise and fall of the hardly less great and important Præraphæelite movement.

In the art of building there is little if any reflection of what has happened in the art of painting. One or two strange new buildings have, indeed, made their appearance in the Strand and Piccadilly, whose sculpture, also by a foreign hand, seems to be akin to the paintings of the Post-Impressionist School; but the change which has taken place in the aims and methods of architecture is, on the

whole, of a quite different character. I remember the time when no one would have believed that a style which seemed so dull and lifeless as that of the Georgian period could possibly be revived; and yet this has happened; and those of us who cannot welcome the new taste with anything approaching to enthusiasm have yet accepted with a feeling of something like relief its staid and not always undignified respectability.

I hope I may be forgiven for a want of enthusiasm for things in which I know many of the younger men find satisfaction, if not inspiration. It is partly a question of temperament. In religion as well as in matters of art England has always stood half-way between the Northern and Southern mind, and for the moment in both spheres the South is very strong just now.

We also stand half-way between the death of old impulses and the birth of new aims. In such periods strange things always happen. In the time which came between the death of the ancient gods and the reign of Christianity Rome was full of strange Oriental cults and superstitions; the same time lay midway between the dead and dying Græco-Roman art and the new Christian art, which we call Romanesque; and in the midst of the undiminished splendour and luxury of Roman civilisation drawings and paintings were produced which, for absence of what we have been accustomed to call drawing and composition, suggest comparison with some things which we see done to-day.

Thirty years ago I remember hiring a little boat to cruise among some of the South Sea Islands. We set sail one evening, and soon found ourselves in a heavy sea; we had an unpleasant night and made but little way, and to my complaints next morning the captain answered, "Well, you see, the waves are very big and the boat is small, and when we are in the trough the sails miss the wind and the boat wobbles." Perhaps we are now in the trough between two waves of civilisation and our sails are too small to catch the big winds; perhaps that partly accounts for confusion of ideas, for want of definite aims and of great ideals.

This view, at any rate, agrees with a theory of civilisation which has lately been suggested by the great Egyptologist, Professor Flinders Petrie. Civilisation, he thinks, evolves itself in a series of waves or phases, of which we know enough to conjecture their average length at some 1,300 or 1,400 years. In each phase the Arts and Sciences unfold themselves in a certain order and attain each their highest point of development one after the other. After the high-water mark is passed each art still continues to live, but after its own particular period of high attainment is passed it never again—that is, in the same phase of civilisation—produces anything really great or really new, and it tends to fall under the influence of whatever other art or science may be predominant at the time. The order of evolution of the Arts and Sciences is the same, Professor Petrie tells us, in phase after phase: first Architecture and Sculpture, then Painting, Literature, Music, Mechanics, Science accompanied by wealth and luxury, then the end. Architecture and Sculpture reached their high-water mark in the thirteenth century, Painting in the fifteenth century, Literature in the sixteenth, and so on. We are now under the influence of Mechanics and Science and Luxury—perhaps this suggests some solution of hidden problems.

*Of Heaven and Hell I have no power to sing;
I cannot ease the burden of your fears,
Or make quick-coming death a little thing,
Or bring again the pleasures of past years;
Nor for my words shall ye forget your tears,
Or hope again for aught that I can say,
The idle singer of an idle day.*

So wrote William Morris—even while the great men of the last century were alive and at work, and even in the midst of his own wonderful activities and splendid achievements. And, as we know, he set aside in great measure the Quest of Beauty in order to devote his time to the aim of the renewal of the very foundations of society. Until we have once more a free and happy people, he thought, we cannot expect to have a true and sincere and living art.

But whether this or that explanation of the present confused and strange state of things is the right one, confused and strange things certainly seem to me. Whether we are by way of giving up the Quest of Beauty, or whether we are still pursuing her by winding paths and devious wanderings, it is hard to tell; and we all hold different views: we even differ as to what beauty is. Perhaps in the last century our ideas of what beauty is were wrong, and have to be reconsidered; perhaps we put beauty in the wrong place—perhaps in too high a place—and we must readjust our judgment. That is my excuse if I venture for a few minutes to ask you to consider once more very roughly what the word Beauty means, and whether there are any criteria as to which we can agree and by which we can distinguish whether a thing is beautiful or not.

First, then, what do we mean by the word Beauty?

The first answer which occurs to me is: A beautiful thing is one which makes a pleasant impression on the senses. Such a definition, however, would include wine, a pudding, or a smell; and no one speaking seriously or correctly would speak of a beautiful smell or a beautiful pudding, or even a beautiful wine; while we rightly call beautiful objects or things whose impressions are made through the eye or ear.

Let us try again. A beautiful thing is one which produces a pleasant impression on the nobler senses—the senses of sight and hearing.

Neither will this do—it includes the beauty of fields and flowers and birds and music, it includes part of the beauty of buildings and pictures, but it leaves out a more important part; it leaves out what I might call the mental or derivative side of sensuous beauty, and it leaves out altogether beauty which is purely mental, such as that of literature.

It is this mental and derivative side of beauty to which I want for the moment to call your attention.

In pictures or in buildings certain lines and combinations of lines, certain masses and compositions of masses, certain colours and combinations of colours, give us pleasure. They give us pleasure by themselves, because of their abstract qualities; but the pleasure they give us is shallow and fleeting unless a mental attitude is created by the suggestion of something beyond themselves.

The lines which compose a portrait of a human face may constitute in themselves a beautiful composition; in addition, they suggest various forms of character. If the character suggested is interesting, then the abstract beauty of the lines is greatly enhanced; if there is no definite or interesting suggestion of character, the abstract beauty of the lines will in time cease to give any pleasure at all. Think of the picture of the sunset in the Garden of Gethsemane by John Bellini: how splendid are the lines and colours of the landscape and the sky! But half the pleasure which they give us would be lost if the mental and spiritual side of the picture was not there. Half the beauty of the composition lies in the spiritual and mental action which it suggests.

Think of the picture of the reclining Venus by Velasquez, acquired not long ago by the National Gallery at an enormous price. Assume that it is as fine a composition of line and colour as ever was conceived; yet how cold it leaves us!

It is possible to think of a building which has every conceivable quality of colour and composition, but which lacks relation to human thought and activity, and which lacks character. In another building some part of the abstract perfection of line and colour has been sacrificed to homely utility or in order to obtain a higher expression of thought. The latter would, I think, be not only the greater but also the more beautiful building—it would give us not less, but more pleasure.

In our idea of beauty we must include not only the direct pleasure given by impressions on the senses, but pleasure given by suggestion or association connected with such impressions.

I am not sure how far this argument ought to be carried. It must, I suppose, be carried far enough to allow us to include within the scope of our ideas of beauty the beauties of poetry and literature;

and we might easily be tempted to include also thoughts and ideas which are quite removed from any relation to sensuous perception.

Here my path branches off into a deep wood where philosophers and metaphysicians wander, of whom some will tell us that Beauty is Truth, and some that it is only another word for Goodness. This path is not for me: and I must get back to more practical considerations. But the difficulty, perhaps the impossibility, of finding a definition which will include all our ideas and all our thoughts of beauty comes, I think, from the fact, on which I wish to lay some stress, that beauty is not a thing of itself.

Beauty cannot be thought of rightly as a thing by itself. It must be thought of in relation to other considerations and other aims, some of equal, some perhaps of greater, weight than itself. It must, in fact, be thought of not as a quality by itself, but as part of a whole, and in subordination to a whole; you must seek the whole Kingdom of God, not this or that part of it.

And that brings me to the second part of my subject—what I might call the ethical part of it—to the question "What are we to do in order to attain Beauty?" If I am right in my view that beauty is to be thought of always as a part of a greater whole, it will follow that, if we want to succeed in attaining beauty, we must pursue it not for its own sake alone, but as part of a whole or together with other aims which, together with beauty, make up that whole.

Beauty is like a flower which has to be thought of as part of the whole plant, together with the roots, the stem, and the leaves and the fruit—you cannot grow a flower by itself.

What is the whole of which beauty is a part? We may call it by many names: with Sir Thomas More, Utopia; with the Christian, the Kingdom of Heaven; with William Morris, Nowhere; and with the pessimist, the Never Never Land. It is the final far-off perfection to which the world is travelling—and it has many sides. Justice and Love, Faith and Reverence, Sincerity and Humility, must all be part of the perfect whole. If these are in some ways not unlike the roots and trunk and branches and leaves of plants, beauty in its turn can be thought of as the flower. With these qualities a society may live a beautiful life and build itself beautiful cities to live in. It was because William Morris thought our society lacked this necessary substructure that he gave up—in a measure at least—the Quest of Beauty and gave the end of his life to work of a social character.

Man has been called the microcosm, the world the macrocosm—the full-sized world and the small abridged copy; and by the practice of the same virtues a man may in time make his face beautiful even if he were born ugly.

Each man's work reflects himself: if you can tell a man's character from his handwriting, how much more can you tell it from his paintings or his buildings! It is from some points of view a painful thought that we cannot put up a building without reproducing in it our own faults and vices as well as our virtues. An architect cannot produce a noble building without having in his own character some elements of nobility. How often, on the other hand, we feel we could truthfully accuse buildings of human vices, such as conceit, pedantry, luxury, sensuality, pride, hypocrisy, and insincerity! I think we make a mistake if we do not apply to buildings the same moral standard which we set up for human life. It is really a serious fault if a bridge constructed of steel is covered with stone in such a way as to suggest a stone arch: it may not mean that its designer is a hypocrite, but it means he does not dislike hypocrisy and love truth as much as he might do.

St. Paul's Cathedral is, I think, one of the most splendid buildings in the world—I know no dome which seems to me more entirely beautiful in its outline—but it is full of structural insincerities which prevent it from being perfectly beautiful. I am not so much thinking of the inner and outer domes; that really raises a very complicated question of architectural ethics. But notice the muddle the architect got into with the clerestory windows; they did not come in the right place on the outside elevation, so he tucked them away under their own sills and put niches, which have not yet been filled with statuary, in their place. If you find a peccadillo of insincerity in such a noble building as St. Paul's Cathedral—of which, indeed, I hardly dare to speak in such a way, and if I do

so I do it with every apology and with profound respect—how much more do you find it in lesser buildings! Indeed, I think insincerity and untruthfulness is the greatest vice in modern building, and sincerity the quality by which, more than by any other, a building gives real pleasure to the beholder.

The slightest suspicion that any feature of a building has been designed or arranged with a view to beauty only and at the cost of fitness or utility mars and destroys the very beauty which has been untruthfully pursued.

Examples of insincerity crowd our modern streets—a turret or a dome or a cupola or a column for which there is no need and which has no real utility; a window which is no window and which perhaps gives no light. There is no excuse for such things, and they fail in the very object for which they were intended. Unfitness is a lesser form of insincerity.

The outside of a building should reveal unmistakably what is going on inside and what kind of people live there and what kind of lives they live. Some buildings are untruthful: some are eloquent of pride and conceit. Not “How can I express the purpose of the factory or shop or hotel I am building?” but “How can I show my own cleverness, or my own architectural knowledge?” was the thought uppermost in the designing mind. Others, again, are expressive of actually vicious feelings. Think of some of the new buildings in Paris—the great new railway stations, for instance, on the Quai d’Orsay and the Gare de Lyons. Pride, luxury, sensuality, are suggested by every line and every ornament. Compare them with the noble building of the Gare du Nord.

On this side of the question the philosopher Emerson has some very suggestive remarks: “We ascribe beauty to that which is simple, which has no superfluous parts, which exactly answers its end.” And again: “The forms and colours of nature have a new charm for us in the perception that not one ornament was added for ornament, but as a sign of some better health or more excellent action.” “Elegance of form in bird or beast, or in the human figure, means some excellence of structure.” “In the construction of any fabric or organism any real increase of fitness to its end is an increase of beauty.” Again: “Beauty rests on necessities.” And again: “Veracity first of all; ‘Rien de beau que le vrai.’”

Insincerity takes many forms, and I would venture to put down under this name some misdeemeanours which do not necessarily involve any intention to deceive. A tower was originally a structure with a serious and generally a noble intention. Towers were added to towns or castles or houses for the purpose of defence, for purposes of keeping watch; they were added to churches and town halls as belfries and as landmarks, and for the sake of greater honour. They were built over gateways and were used to hold precious things such as documents and muniments. Domes were originally used to cover chambers which either in respect of their use or of their contents deserved especial honour. It is a degradation of such noble objects to use them in connection with a place of business as a mere ornament or as an advertisement; if so used, however beautiful they may be, they lose their dignity, and their beauty is degraded and ceases to give real pleasure.

Of late years vast sums of money have been spent in the decoration and beautification of shops, largely, without doubt, for the purposes of advertisement—to enhance the sale of goods and the making of profits. Sometimes it may happen that the buildings are really beautiful; but their beauty is degraded by its motive; it gives no real pleasure, and it tends to lessen our pleasure in beauty, even in other cases and when it is attained in its proper place.

Beauty must be pursued only as part of a whole to which it properly belongs. Beauty is akin to pleasure, and it has this also in common with pleasure: that if pursued for its own sake alone it cannot be, at least in the long run, attained.

Well, how can all this be made to apply to sculpture and pictures? Surely, you will say, there can be no other object or aim than beauty in a landscape, and surely scores of our landscape painters have attained it.

I think there are two kinds of painting and sculpture—imaginative, which can truly be called

creative; and transcriptive or imitative, which is not really creative, but makes records, or, as Plato called them, "imitations," of landscape or of human beings. To really creative art what I have said applies. If in painting an imaginative picture the painter aimed only at producing a canvas pleasing to look at, and did not also attempt either "to lay bare some noble truth or to arouse some noble emotion," he would hardly succeed in attaining even the beauty which he aimed at. But a landscape painter is not producing a new beauty which did not exist before; he is rather, I believe, making a record of some work of the Divine Mind which is already in existence, of some fleeting composition of clouds and sunlight which was for a few moments in existence, but has passed away for ever; and the natural beauty which he records is itself subject to the very law of which I have spoken; for there is no natural beauty which is not intimately bound up with utilities. Indeed, to our material minds, it is easy to think of all natural beauty as a by-product in the Divine workshop.

I began by making an attempt not, indeed, to define beauty, which I suspect to be impossible, but to find some form of words which would indicate, however roughly, what we mean or what we are thinking of when we use the word. We have in our mind, I thought, something of this sort: Some quality in things which, by the impression made on the senses of sight and hearing—and especially, for our present purpose, that of sight—causes pleasure; and I extended the sense of the word so as to include pleasure caused not only directly but indirectly by means of association and suggestion. But this is not in any exact sense a definition, and it is not in any sense a test by which we can authoritatively determine what should be called beautiful and what not; for the effect of different impressions, and, indeed, the impressions themselves, vary in the case of every mind which receives them; and in order to get a test it would be necessary to further determine which minds are to be accepted as authoritative. That, I am sure, we can never agree upon: nor would we accept the judgment of the majority at any given time. We cannot agree upon any oligarchy of instructed minds at any given time, and the judgment of posterity varies from age to age. Is it, then, only a matter of opinion? Is there no rule of right and wrong in the region of æsthetics? I believe there is; but the rules are in the mind of God, and can only be partially and with some uncertainty apprehended by the mind of man. Can we, then, get no farther? Perhaps not much farther; but I would beg to put before you two or three sentences from the writing of a philosopher of the second century which, I think, will carry us about as far as we can hope to get.

"Our interpretation is that the Soul, by the very force of its nature, by its belonging to a nobler being in the rank of beings, when it sees anything of that kinship or any trace of that kinship thrills with delight, takes its own to itself, and so is stirred afresh to the sense of its nature and of all its affinity." And again: "The material thing becomes beautiful by partaking in the Reason that flows from the Divine."

We know how closely associated were the good and the beautiful in the mind of Plato. Plotinus seems to have seen little, if any, ultimate distinction between them. He says: "Therefore let us make our way upward again towards this Good—the desired of every soul. If any man have seen it, he knows what I intend when I say it is beautiful. Even the desire of it is a thing desirable as a good. To attain it is for those that are willing to take the upward way, for those that will turn away from other things for it—divest themselves of all we have gathered round us by our descent. So to those who go up to the Holy Celebrations of the Mysteries there are appointed Purifications and the laying aside of the garments worn before and the approach in nakedness; until passing on the upward path all that is other than the God, each in the loneliness of himself beholds that lonely dwelling Being—the Apart—the Single—the Pure—the Being from which all things depend, for which all look and live and act and know, for that this is the cause of Love and of Intelligence and of Being."

This, then, is my conclusion: That we cannot define beauty; but we can attain to some knowledge of its nature and its qualities by means of a kind of intuition, which forms part of our nature and which is the more reliable in proportion to the extent to which we have succeeded in divesting

ourselves of pride, conceit, and vulgar aims and insincerity : in proportion to the extent to which we have succeeded in climbing the steep ascent at the summit of which is enthroned the Divine Mind in which beauty was first conceived and by which alone it can be fully realised and understood.

If I am right in my conclusion, it is moral qualities rather than merely æsthetic qualities which are at the bottom of the real excellence of a work of art. Æsthetic qualities, such as those of line, composition, colour, and proportion, are, indeed, essential; but they alone do not go very far in deciding whether a building or a picture is going to be a great one or not. They are only parts of a greater whole. An architect must have a certain mastery over these matters—but it is only the beginning; the end—the great attainment—is a moral rather than an æsthetic question.

Does this mean that the architect of a great building must be a great man? No, indeed—fortunately for most of us—but it does mean that his heart must be open to the greatness of the society to which he belongs; so that his mind may be the channel through which the greatness of his country may flow. The greatest buildings were produced by men whose names have been forgotten—in places where great nations flourished and in times when great ideas were in the air.

If you look at buildings from this point of view, they become like a human face in which some little subtlety of line or modelling which you could not describe—still less define—reveals all the qualities of which the human soul is capable.

A Greek temple suggests all the great qualities of men, except those which are the peculiar outcome of Christianity. It is, moreover, perfectly honest and sincere. The essential requirements of a place of worship—indeed, of any place of public assembly—in Greece and Southern Italy were a roof to keep off from the people the vertical rays of the sun and the rain, which in these countries is also generally vertical, and underneath it plenty of fresh air and a shrine or cell for the altar and image of the deity. No more direct and straightforward method of attaining these ends could have been devised than the Greek temple. The same ends are attained by primitive peoples in these days by exactly similar means. The huts of the South Sea Islanders consist of a thatched roof carried on timber posts, between which, for more complete protection from weather and people, are hung screens or veils of matting or wicker-work, just as in some temples the spaces between the pillars were filled up with veils of walling. Even the principal decorative feature of a temple—the pediment—was the unavoidable gable end of the roof.

That Greek methods and traditions can be effectively used in modern times, and even in northern climates, is very probable. It has, indeed, been done more than once. One of the most beautiful and successful buildings I have ever seen is the Bank of Montreal, in Montreal, by Mr. Stanford White, in which the Greek style has been adopted to modern ends with extraordinary sincerity and success. But I venture to think that the secret of Mr. White's success was that, with perhaps one exception, he put away everything that was peculiar to Greek circumstances and adapted their methods with complete directness to modern needs.

Is it not, on the other hand, true of most buildings in the Greek tradition, in this country at least, that the problem of adaptation has not been really and courageously faced? Are not elements of Greek style, used by them for purely constructive purposes, used by us as mere decoration? Is it not fundamentally wrong to use a pediment, as it is sometimes used, where there is no roof behind for which it is needed as a gable? Or to use so serious and noble an element as a pillar, as it is sometimes used, for the decoration of the surface of a wall? Or to use—also for decorative purposes—a lofty, narrow portico, which in this country is not only useless but often extremely inconvenient? What a beautiful piece of design St. George's Hall at Liverpool is, and yet what a disingenuous personality she shows, holding up her hundred-fingered hands before her eyes and pretending she has no windows, while in reality she strains her half-lighted eyes through her shadowy columns!

The attempt of the last century to adapt to modern use the Gothic tradition was perhaps not much, if any, more successful. The tyranny of the pointed arch was as great as that of the Ionic

column and the pediment. What a dyspeptic pile of undigested Gothic arches is St. Pancras Station! If we are to use either Greek or Gothic traditions to real purpose, we must get out of our minds the idea that the one consists of a particular shape of arch, or that the other is incomplete without elements which arise out of times and circumstances different from our own.

Would it be better, then, to forget the old traditions and start afresh? That idea has also been found—at least, for the moment—unattainable; no adherence to traditions, however blind, ever produced anything so bad as the work which not so long ago lived its short and unregretted life under the name of the Art Nouveau.

Probably no new birth of art is possible in our present stage of civilisation. If Professor Flinders Petrie is right, the great age of the graphic and plastic arts—so far as our present phase of civilisation is concerned—passed away in the thirteenth, fourteenth, and fifteenth centuries, and cannot come again until a new phase of civilisation or social evolution begins.

The birth of a new civilisation only takes place, in Professor Petrie's view, on the occasion of the marriage or amalgamation of two distinct races of people; and if he is right in separating our modern phase from the Græco-Roman phase of social evolution, he is justified in connecting the former with the amalgamation of the Teutonic and Græco-Roman people which took place in the early centuries of the Christian era. And, again, if he is right, we find ourselves in a position analogous to that of the peoples inhabiting the Roman Empire in the centuries known to us as the Dark Ages, while the old civilisation of Greece and Rome was dying and the new phase was not yet born.

This is not necessarily, I think, a depressing point of view for an architect. Some of the noblest and most delightful things in the world have been done in times like these: buildings produced at such times have been full of the highest spiritual, if not the highest technical, qualities. It is like that most enchanting time—the time to which we are now approaching—the last weeks of winter which precede the spring. It is the time of the greatest hope; but it is also the time of severest purification, when all the dead leaves, all the useless débris of last year's fertility, have been gathered into heaps and burnt, and nothing has been retained as the basis of the new crop except the very essence—the seed itself—of what has gone before.

This, then, is the suggestion I venture to make: let us burn our rubbish heaps and forswear our shibboleths; let us make a covenant not to use columns unless they are really needed to support something; not to use pediments unless they are really needed to close up the end of a roof; not to use pointed arches unless they are really better suited, or at least as well suited, to our structural purposes as any other form of arch. Let us burn our rubbish. A building speaks to us by its lines and its form, by its construction, by the way it goes about its work, but most directly of all by its ornament.

What is ornament? Just now it may be defined as a tassel or string of tassels. You just hang them up on your elevation wherever it looks a little bare or if the lines do not seem to quite come together without it.

I will ask you for a moment to stand with me before the west front of the Cathedral of Amiens and look at a different view of ornament. The whole front is a mass of ornament, but what is it? It is the exposition by means of statues and bas-reliefs of the whole theological and ethical system of Christianity. It is the transference from—or perhaps I should rather say through—the mind and hand of the mason to the heart of the spectator of all the noblest and most profound feelings and thoughts and ideas which were current in the thirteenth century in the minds of men.

Probably originally all form of ornament conveyed a definite thought from the mind of the artist to that of the spectator. The repetition of alternate curves which we call the wave pattern—and which forms so large a part of the pattern on the floor of the Baptistry at Florence—no doubt represented water from the earliest times: the chevron probably represented and suggested mountains.

Mr. Christie, whose delightful work on pattern designing appeared three years ago, thinks that all traditional forms of ornament originally conveyed information.

Whether this be so or not, the great mass of traditional ornament has lost its meaning or its symbolism for us, and the question arises how far we are justified in using it. Ought we to reject it altogether and never use ornament which we have not devised and thought out for ourselves? That would be a high and praiseworthy ambition; perhaps we need not go so far as that. But we ought not surely to use any ornament which embodies a definite thought or feeling of a past time or of another country in which we do not participate. We ought, as far as possible, to go back direct to nature for our natural forms and to make our own abstractions for our own purposes; and if we do allow ourselves to use traditional forms, we ought to do so for some sufficient and definite object, and not only because we think it is correct or belongs to the style.

Count Tolstoi, in the little treatise on the nature of art which was published in 1898, tells us that the activity of art is the infection of one mind by the feelings already existent in another; from which it follows that if you have no real feeling in your mind, you cannot convey it to another mind, and your work is not art.

Two real difficulties attend the exercise of the graphic and plastic arts to-day: one that an easier and cheaper method of conveying thoughts and feelings has—I had almost said unfortunately—been invented—I mean printing; the other that we do not seem to have any very important or definite feelings to convey from one to another. We are in the trough of the wave, and we do not feel the great winds of heaven. Let us wait patiently till we reach the crest again—who knows how soon?—and meanwhile let us purge ourselves of unnecessary bedizenments; let us burn our rubbish and occupy ourselves with homely usefulness and innocent necessities. So shall we be ready for the great times which will surely come again.



From a plate in the *Gazette des Beaux-Arts* (1902), after an etching by Félix Bahot.

AN ARCHITECT'S REVERIE.

Extracts from an article entitled "A Quest for the Spirit of Architecture," by W. R. B. Willecox, in the *Journal of the American Institute of Architects*, December, 1913.

The talk one evening had turned upon the character and elements of appeal in works of art and nature; in architecture, music, the drama, sculpture, and the landscape, and how they are interpreted to men.

The day following I strolled out toward the hills. It was a warm and fragrant day in early summer. The foliage of trees and shrubbery was rich and colourful. The lawns, woven thick with the year's new life, rolled away between banks of verdure. Afar in one direction lay a gently rolling country, through which a winding river coiled a silver thread, and miles away, glistening like a floor of burnished metal, lay the clear waters of a mountain lake, from which low foot-hills climbed to rock-topped peaks beyond.

It was a gala day, a day of festival, and people, pleasure bound, strolled round about; some sought out flower-bordered paths, while others chose half-hidden lanes beneath the trees. But a steady throng, in groups and singly, passed up the hill over a broad, grass-carpeted thoroughfare. Many stopped, from time to time, to gaze in silence on the scene, or to voice a deep contentment in its harmony.

Moving with this happy company, in the shade of high, over-arching trees, I climbed the gentle slope and presently approached a park. The entrance, through a shrubbery wall, was flanked by granite pedestals, on which two bronze equestrian groups were raised. Alike in character, a youthful rider sat bareback a charging horse, whose prancing, plunging mate he strove to hold in check. What power! What action! How true the poise! How fearlessly the young man hung upon the bridle with his wilder charge! How confident of mastery! And passing people stopped to contemplate. What was it seized their interest? Was it moulded bronze or modelled granite; or the tale they told with strength of line and grace of form; the power of those frantic horses; the calm, determined courage of the boy?

Inside the park the way led toward a forest's edge, and there within the grateful shade, framed in by rising ground, were circling tiers of marble seats, and down between their curving ends an open stage. The seats were filled, and on the stage a play progressed. There were a battlefield and struggling armies, and in their midst two champions met and fought. The audience was hushed and tense; it followed the rush of passion. Lifted to a share in the combatants' emotions it felt the spirit of the play; forgot the tinsel armour in the rhythm of the vanquished's dying words.

Soon the play was over, and with those who, like myself, had loitered for a time, I joined the number who were seeking recreation farther on, reflecting the while how, whenever the great thing is done, or the little thing, with seriousness, it is not the means

employed, not the phraseology that stirs the deep emotions, but the meaning conveyed.

As I turned these fancies in my mind my attention was diverted by the faint notes of distant music. Quickening my pace in their direction, I soon came within view of a pavilion far across a spacious common, whence came the sounds. As I drew near, the humming noises of an intermission ceased, the deep wood instruments gave out the old familiar theme of the overture to "Tannhäuser," and over the silent audience swept the well-known strains. With what tingling satisfaction did one hear the oft-recurring voices of first one and then another instrument, as their mingling tones wove the wondrous fabric! And when at last, like rich embroidery of gold against a bright clear field of blue, the blaring horns set forth the mighty pattern on the trembling background of the violins, the very soul of music seemed revealed.

The day was now quite well advanced, and, with a wish for one broad outlook over the country ere the shadows grew too long, I turned my steps toward a not-far-distant headland. From the plain, great flights of steps between successive terraces led upward to the summit. At every higher level a wider prospect spread, while restful seats beneath the trees invited one to tarry. The upper terrace was elaborated with an imposing central stairway with statuary at its foot and head. It clearly marked approach to a formal landscape scheme above, and gently led the mind from contemplation of the distant view to speculate upon the hidden scene beyond.

So with eager anticipation I gained the topmost steps, but, as the picture burst upon me, I stopped in wonderment. Imagination had failed to conjure up a scene of such magnificence. A spacious avenue led straight away for many hundred yards; great trees in formal rows closed in the sides and cast their dark reflections on the placid surface of a shallow pool, which, bordered with cool, white marble walks, stretched from end to end. On either side, outside the walks lay turf, like long green bands of velvet, and on its outer edges, just within the rows of trees, as through a jewelled hem, were narrow beds of many-coloured flowers.

Yet this was but a setting—a concentrating framework. Far down the narrowing perspective the eye beheld what seemed an apparition. There, terminating the marvellous vista, arose in dazzling splendour a snow-white marble structure, and in the waters of the pool its stately form was mirrored. Its polished surface shimmered in the sunlight; its glistening, curving dome against a clear blue sky seemed floating in mid-air, and, like grey mists, transparent shadows hung beneath its cornices. Its like I had never seen.

Forward I walked along the path beside the pool, fascinated by the sight. So perfectly did its lines and masses balance, so delicately proportioned to each other were its several parts, so beautifully the sunlight played upon its varied surface, it seemed instinct with life. It seemed to lift itself and soar above the broad, white marble table on which it

stood, and yet it left no sense of insecurity. With all its seeming conscious power it stood there calm and self-contained. As I drew near I saw that many of its parts were unfamiliar shapes; strange carvings and mosaics embellished them; their colours, outlines, sizes, and positions resolving into an appealing harmony. The pleasurable emotions which the sight occasioned were interrupted by a near-by conversation which stirred my interest: "A strange structure," the speaker was saying, "it does not seem to conform to any of the accepted models of architecture. Why do some artists, some architects, presume to attempt originality when it is futile to try to surpass the perfection of the ancient Grecian architecture—why depart from the old types?" To which an eager companion rejoined: "Why depart from the old types? Because no artist is truly an artist who does not depart from the rigidity of accepted types; who does not stir us from inert acquiescence in habit and custom; who does not incite us to revolt from the tyranny of the standards of the past. Why, pray, concern oneself with an archaeological diagnosis of architectural symptoms? Do you think to discover its spirit by such a process? Is the soul of man to be revealed by a review of the conventionalities of his manner and speech? Must these very flowers here be subjected to a botanical analysis before their charm of delicacy, fragrance, and colour may regale our senses? Think you, forsooth, the spirit of the overture we have heard is impossible of interpretation because to the orchestration of Wagner is added the timbre of instruments unknown to him? Did not Wagner himself break the rules, and was he not a dreadful radical in his day, while to-day he is a classic?"

"Were the sculptures of the boy and the horses, surcharged as they are with the strenuosity of our own day, dumb to you because they do not counter-part the figures of a Praxiteles or a Donatello? Is the spirit of the drama, its message to our day, found in the historical accuracy of the garments worn, the mimicry of weapons of the olden days? Is it an intimate knowledge of the flora, or the geological formation of this country about us that makes all these people respond to the beauty and the glory of the landscape? Is it any more likely that the spirit of architecture, its power and purity, is to be felt only as we come to know its obvious historical association; that the latter is, as we say, consistent, true to some particular period, true to some particular racial manner?"

"Would you have the spirit of architecture communicate only with those who may have critical knowledge of its outward manifestations; with the educated and cultured? Must it be silent for the uninformed majority? And you fail to catch the spirit of this building, although it speaks in flowing rhythms and measured cadences, because, familiar as you may be with the full catalogue of architectural precedents, your knowledge does not embrace the forms and features which supply its media of ex-

pression! Could you know that it was, in fact, the consistent flow of some distant architectural culture of a strange yet virile race, would you open your heart to its emotional appeal? Must sympathy and understanding wait always upon knowledge? If so, how shall the spirit of architecture speak to all people, to the untutored public; and if it shall not speak to them, why should the untutored public be expected to give heed to it? Why should it interest them, and why should we waste our efforts in trying to educate the ordinary citizen, who has neither time nor inclination to inform himself upon the evolution of architectural styles if an understanding and appreciation depend upon a broad knowledge of precedents?"

"Why, we have tried to build an architecture largely out of forms; we have looked abroad, and, beholding some lovely manner of building, have seized upon the forms there used, and thought to build a new and vital architecture out of them, whatever, in the foreign land, has been the motive or their use. We have tackled every foreign style in turn, and sometimes to an ancient style returned a second time. But only now and then our buildings seem to have the breath of life within them. For the most part we have set these oft-used shapes up side by side, and hoped that by some chance the spark of life would enter them and make them live. Why do we always hope? Because, from time to time, some man appears who is more intent upon the freshness and verity of an idea he would express than he is concerned with a conscientious and painstaking reproduction of a vehicle used long since for the conveyance of an idea of a different sort. He imbues his structures with the spirit, not the forms necessarily, of the ancients; he sees that life is in the union rather than in the category of shapes employed; has felt down in his heart the rhythm of such union, and has liberated its spirit to live on and on for ever. Others, mistaking substance for soul, have foolishly concluded that the abode of the spirit of architecture had been discovered, that it dwelt in the forms he used, and that by their use alone it could be invoked at will. An attempt so to do, however, revealed what an illusive, wraith-like wanderer that spirit is.

"The years pass by, and then another man beholds the light of that spirit and lets it shine for us, and, while he lives to do so, we think we add to its lustre, when the truth is we supply only reflections, sometimes quite perfect, but still only reflections. Consider the case of a man like Richardson; despite what we are assured was a barbarous medium of expression, many of his buildings live and sing. Surely it was not the forms that produced the effect, for soon a hundred others grouped them in a thousand buildings, and yet in them there was no life, no song.

"Again, a man imbues with life the forms of ancient Grecian architecture, and soon the classic style becomes the vogue. A bank, a school, a church or library, a club, a theatre or a house, or any other structure, need only have upon its front a row of

columns, a pediment, or attic stage, and there, behold, is architecture! Alas, such forms are all too often lifeless masks, or shrouds, appropriate perhaps for things so dead; they lack that vital thing, the living spirit of architecture, which awakens only at the call of truth, of frankness, of fitness, of courage, of individuality. If we would find that spirit we must rid ourselves of sham, of indirectness, of timidity, of servility, and, with unwavering faith, undismayed by many failures, press on toward the future; for at any given time the spirit of architecture, of any art, dwells just beyond the present and concerns itself with the hopes, the aspirations of a people. It is the prophet of an ever-changing, ever-expanding appreciation of what is true and noble and beautiful."

As the speaker paused I awakened from my reverie. The setting sun was casting purple shadows round about, and making deep the blue of distant mountain sides. The lake was pink from sunset clouds, and evening stars began to dot the sky. It was drinking in the beauty of that scene that charged my thoughts and coloured them. If we, as architects, would more and more cultivate that simple attitude of appreciation and receptiveness for the larger qualities of architecture with which we approach the drama, sculpture, music, yes, even the landscape, we would be able the better to seize and imprison in our buildings the spirit of architecture, to interpret to all who follow us the ideals of our people and our day.

REVIEWS.

MUSIC AND ARCHITECTURE.

What is Music? By H. Heathcote Statham. So. Lond. 1913. Price 3s. 6d. [Chatto & Windus.]

There is plenty of excuse for alluding in this journal to a book on music. Architecture and music have close bonds, though the explanations generally given of those bonds are quite enough to disprove rather than to prove the connection between these, the two highest of the arts. I need not plead the reasons that Vitruvius gives for equipping a young architect with musical knowledge. We no longer have to "tune" the gut halyards of a catapult, nor do we need to adjust the tone of terra-cotta resonators in a theatre. Indeed, if I had to fall back on Vitruvius as justification I would rather turn to that knotty chapter—I think it is the fourth of the Fifth Book—which, with its diagrams, makes so brave a show among the woodcuts of the Como edition. It was that chapter Vitruvius will admit that made them first aware of the existence of a real live book by a real dead Greek on the subject of the Hellenic Scale. I certainly should never have owned (nor wrestled with) a copy of Aristoxenus if it had not been for Vitruvius.

But we have in the present volume yet another

excuse for pleading the architectural link. It is written by Mr. Statham, known to most of us as primarily an architect and a writer on architecture. There are, I suppose, a great many architects whose leisure is made the happier by the performance of music or the enjoyment of it; but there are few in our generation, if any, whose powers as students, exponents, and executants of music have been so developed as in the case of the one-time editor of the *Builder*. Indeed, I venture to think that his power of writing on the technicalities of music in such a way as to be understood by unprofessional readers is remarkable even among musical writers.

The present volume is intentionally popular. It is designed to give the common concert-goer the means of applying intelligence to his enjoyment and thereby increasing it. Mr. Statham is a man of tastes—by which expression I necessarily mean that he is a man of exclusions—consequently it is not likely that every man of taste who reads the book will agree with the author's selections and rejections. Wagner, for example, is to Mr. Statham a mere bubble to be pricked; and though Bach is to him a giant, it is mainly as a writer for the organ that he reverences him, and I gather that to Mr. Statham Beethoven is a greater giant still.

Those who have a tolerance, or a respect, or perhaps some stronger sentiment, for Wagner will not agree; nor will those to whom the B minor Mass has become the greatest of the splendours of all art. But these differences of opinion or of choice are nothing and take nothing from the value of the book as a guide to the educated appreciation of design in sound.

Mr. Statham writes with the most helpful appreciation of the difficulties of beginners. There are a number of simple questions which humble folk feel shame in asking and which persons of real or assumed musical culture are slow to answer. What, for example, is a sonata! What is the difference between a concerto and a symphony? These are conventional terms which no light of nature can elucidate. The author explains them with the most patient clearness.

His great love of Beethoven, with which all must sympathise, even if Beethoven be not to them the highest of the angels, leads him to give an extended analysis of the greater works of this master, which makes a most valuable illustrative training for the general study of instrumental composition.

Music, says Mr. Statham, is proportion and extension in Time, as architecture is proportion and extension in Space. This neat statement, if somewhat inadequate as a definition of both arts, is interesting and true as far as it goes. And this again is good: "The creation of melody is the most pure form of musical inspiration." Indeed, it is probably more than this. I suspect that, subject to the present conditions of human limitations, it is the highest of all artistic achievements.

If I may here assume that music and architecture are the two highest of the arts, their isolation, almost

side by side, on the highest, loneliest peak of Parnassus is in itself sufficient reason for mutual homage among their devotees. I will not set out here the proofs of that lonely exaltation, but I may acknowledge, with some regretful certainty, that the seat of music is the higher on the mountain.

And if some evidence of this is wanted may I point out that in no art whatsoever is it given to the worshippers to enter so completely into the mind of the creating artist as in that of music?

You may select a masterpiece of Michelangelo's sculpture and consume it with sight and touch; you may sit for a whole morning of variant sunshine and gloom before the great Van Eyck picture at Ghent; you may even, with eye and ear, plunge into the dramatic triumphs of Shakespeare and Æschylus; but by none of these roads will you so enter into the seventh heaven from which the artists speak as by the way of music. Play however inefficiently a string part in a Beethoven quartet, sing however feebly a chorus line in Bach's Magnificat, and you have gone for the time into the inner shrine with these great ones.

The only intimacy which can compare in any degree with this magic initiation of the musician is the share which the architect while labouring at his own craft sometimes gains (and recognises) in the inspired work of his great predecessors. Herein lies one of the secret joys of that often despised privilege of the architect—the privilege of submission, humble submission, to the form of sound doctrine.

PAUL WATERHOUSE [F.].

THE MASON'S CRAFT IN ENGLAND.

Notes on the Organisation of the Mason's Craft in England. By W. Cunningham, D.D., Fellow of the British Academy. Pamph. 8o, 1913. 1s. [Humphrey Milford, Oxford University Press, Amen Corner, E.C.]

In a pamphlet of eleven pages under this title Dr. Cunningham has given some interesting particulars as to the constitution of the Craft of Operative Masons in England and the origin of Speculative Masonry as practised in the present day here and in the Colonies and dependencies of the British Crown. Extracts from old cathedral building accounts quoted in this pamphlet throw an instructive light on the relation between the craft and the ecclesiastical authorities in bygone days, and there are valuable references to the regulations enforced upon the various "Lodges" by such authorities standing without the pale of these "Lodges."

But there are a few points in Dr. Cunningham's Paper upon which he will surely be challenged. For instance, when he says, "The principal employment of stone-masons was on the great abbeys and on castles," surely he should have included parish churches; and when he adds, "It is probable that in early times building was carried on as a domestic employment by monks who did their best, as a religious duty, for the erection of a church and the

housing of the community," the inference is surely that Dr. Cunningham is of opinion that for all work of less importance than great abbeys and castles the skilled artificers, and particularly those at their head, were not employed. But surely, the development of architectural detail, whether in the smallest church or the great abbey, from period to period along lines governed so obviously by ruling principles, renders impossible the conclusion that to the individual efforts of members of different monasteries was left the production of the large number of ecclesiastical buildings in this country.

There is not wanting considerable evidence that the creation of architectural tradition which in the Notes before us is attributed to monks was not their work, although in individual cases doubtless it happened that sometimes a monk would be taught the craft of building and might take the place of the master mason; and it is not impossible to show that work attributed to the ecclesiastic was really designed and executed by the masons called in by him for the purpose.

Moreover, the statement that prior to the fifteenth century "we have no direct evidence in regard to the organisation of the building trades" will hardly be tenable if Italian sources of information are admitted; and surely, in view of the fact that from the sixth century English ecclesiastical buildings were in the hands of Italian masons, to some extent at least a reference to these sources must be admissible.

One more quotation will further illustrate the point on which it is suggested some will not accept all Dr. Cunningham's conclusions—viz., that in which he says: "Part of the ordinary monastic establishment at Christchurch consisted of a certain number of carpenters and artisans, who were retained to do the ordinary repairs on the monastic buildings, including the church, and on the houses on the estates."

This, doubtless, is true, but if the reference is to the Priory of Christchurch, Hants, it is a well-established fact that several churches in the Forest were built under the auspices of this Priory, and the similarity of their detail, as well as their conformity to the style in vogue in England at the times both of their erection and enlargement—viz., the 12th and 13th centuries—leaves but the one conclusion that a master mind, with experience obviously wider than a merely local education would give, controlled the work done by the Priory Church of Christchurch, Hants.

But if Dr. Cunningham does not, as some will think, sufficiently credit the evidence adducible as to the tolerably complete organisation of the Masons' Craft in England before the 15th century, and if, as others will contend, he attributes too much to the skill and labour of individual and independent members of the monastic fraternity, he gives us at least a Paper which is evidently the result of a good deal of research, and which is well worth the study of all interested in its subject.

W. RAVENSCROFT, F.S.A. [F.].

ST. MARY'S GUILD, LINCOLN, AND MEDIEVAL BUILDERS.

By W. WATKINS, Senr. [*F.*]



St. Mary's Guild, Lincoln : Front Elevation of Existing Building.

WAS there an Arts and Crafts Fraternity in England exclusively devoted to architecture and building during the Middle Ages ; and, if so, under what system were its members trained, and where was its training establishment ?

It is a remarkable fact that, although our mediæval architecture has been so well described, its characteristics ascertained, and the times of its construction divided into periods, the system under which those characteristics were developed still remains a mystery ; for it is claimed by some writers that the clergy were the chief architects of our mediæval cathedrals and churches ; by others that it was an organised body of Freemasons, who were endowed with special privileges by the Popes, and who travelled from place to place, and even from country to country, in pursuit of their calling, to whom credit must be given for the designs of those magnificent buildings. There are yet others who assert that mediæval architecture was developed

and practised by independent architects, and that the edifices were erected by builders under contracts in much the same way that similar works are designed and carried out at the present day.

In these conflicting views there is no expression indicating the existence of a training system in England, nor of an educational establishment in which the building arts were taught ; and yet there is ample proof in other ways of their existence, though documentary evidence is wanting.

But when we recall to mind the exclusive habits of these old building fraternities, and the secret methods they adopted in the management of their affairs, and then remember the repeated legislative Acts suppressing their guilds in this country, we need scarcely feel surprise at the absence of all documentary evidence on the subject, for it may have been either designedly or accidentally destroyed.

But brick and stone are more durable and more reliable than documents, and as the evidence in Italy and in France (to be referred to later) corroborate each other on the subject, and as those are the countries from which we derived the first principles of our mediæval architecture, it can scarcely

* Recent investigations show that in the extreme left-hand bay of the front (see photograph) there formerly existed an entrance leading to the newly-discovered circular staircase. All the dressed stone work of the outside of this doorway was removed probably centuries ago, and the space was walled up, but the whole of the jambs and arch of the doorway remain complete inside.

be doubted that those who brought the architecture would introduce with it the system out of which its principles were evolved; and as the evidence referred to is further supported by the existence of a building in this country identical in plan with a training school and workshops at Florence, hereinafter described, the belief that a similar system of training and schools existed here seems almost irresistible.

Some time ago I was favoured with the publication in this JOURNAL [11 Jan., 1913] of a Paper, with illustrations, on "The Buildings of St. Mary's Guild, Lincoln." Since then the removal of some brick-work and the clearing out of the fireplaces and drying floors of the modern malt-kiln have revealed several additional features of this Norman building.

One of the staircases (the north-western one) indicated on the published plans as probably existing, though not visible, at the time, has since been discovered, and it is almost in the exact position shown there, and of the same circular form. An additional entrance doorway has also been exposed in the northernmost bay of the front wall next the High Street, which was evidently the private way of approach to this newly discovered staircase. Another doorway has likewise been uncovered in the north outer wall of the building on the mid-landing of this staircase, which it is believed could only have been the private way of approach to a lobby (supported on an arch) at the entrance of the secret chamber of this craft guild.

Other features have also been exposed which, together with those just described, strongly support the suggestion made in the published paper previously mentioned—viz., that this building was erected as the headquarters of the arts and crafts fraternity of this country, and that it was occupied by them during the Middle Ages. But as the very existence of a fraternity of builders that controlled the arts and crafts in this country during the Middle Ages is still an open question with a few antiquarians, it seems necessary to say another word on that subject.

Accepting, then, the dictum of Mr. W. Ravenscroft, expressed in his little book *The Comacines*, we find that a building fraternity composed of a race of men from Central Africa did exist even a thousand years before the Christian era, and that they migrated to Asia Minor, whence they dispersed in organised bodies, and, of course, at various periods, to Jerusalem, Egypt, Greece, and to Etruria in Central Italy, at which latter place they became known as Etruscans; and after acquiring considerable reputation in architecture and building there, their services were in great demand at Rome until the troublous times of the Empire, when they were forced to take refuge in the little Republic of Como. Here on the island of Comacina they established their headquarters, consisting of a school in which the building arts were taught, workshops in which novices were trained, and administration offices in which the business was managed. The reputation of this

college spread so wide that the services of its qualified masters became in great request in Western Europe, and many of them were sent (through the influence of the Popes) to Germany, France, and England to build churches for the converts to Christianity in those countries.*

Another section of this same building fraternity from Como re-established themselves (at a later time) in Lombardy, which embraced in its confines the old Etruria where the company first settled on landing from Africa centuries earlier, and here in the old Tuscan district they founded many lodges,† of which the following is a list culled from Leader Scott's *Cathedral Builders*:

Page.	Lodge.	Date of foundation.
19	Lucca	A.D. 1000
211	Pisa	1080
208	Pistoja	1110
19	Parma	1120
186	Cremona	1289
20	Milan	1332
19	Sienna	No date
313 & 319	Florence	13th century

I am afraid, however, that we modern people are much too prone to think of the term "lodge" in the same light as we view the Freemasons' assemblies of the present day—that is, merely as moral and social fraternities; whereas the first principle of the ancient masons was entirely of a business character, as the organisation and constitution of their societies, as related by Leader Scott, abundantly prove; for instance she says that:

"In Tuscany we find the three branches" of the Lodges recorded.

"First: There is the school where novices were trained in the three sister arts—painting, sculpture, and architecture."

"Second: There was the *laborerium* or great workshop, where all the hewing of stone, carving of columns, and cutting up of woodwork was done—in fact, the headquarters of the brethren who had passed the school, but were not yet Masters."

"Third: There was the Opera or Office of Administration, which formed the link between the Guild and its patrons."‡

After quoting further from old documents the same writer says:

"This is very interesting in many ways. It proves that architects who had been for some years in the service of the City and Province of Florence had been formerly established at Lucca, but from December 14, 1321, they were to be considered as permanently in the employ of the Florentines, and were permitted to provide a *laborerium*" (i.e. workshop).

"These documents, dating respectively forty and seventy years before the *Civile Arte dei Maistre di Pietra &c.* was founded, offer sufficient proof that the Lombard Guild was the source of all the earliest Tuscan lodges, and existed long before any of the ordinary trade guilds."

"An argument for its unity is also found in the fact that no great work in architecture arose in either Lucca, Pistoja, or Pisa after the removal of this lodge to Florence, while all the great Florentine buildings date after this time."§

When it is remembered that at about the times those lodges existed in Tuscany there were similar

* *Cathedral Builders*, pp. 143-145.

† *Ibid.*, p. 141.

‡ *Ibid.*, p. 207.

§ *Ibid.*, Preface, p. viii.

corporations or guilds of masons and stone-masons in France, and that there was also at the same periods (as far back at least as the twelfth century) the fraternity known as "The Companionship of the Tour de France,"* respecting which Mr. Gould says in his *History of Freemasonry* that it comprised three great divisions—viz.:

"The Sons of Solomon, composed of masons, joiners, and locksmiths."

"The Sons of Master Jacques, similarly composed."

"The Sons of Master Soubise, of other trades."†

Gould goes on to say that:

"Nothing strikes us as more peculiar and enlightened for their age than the remarkable fact that in every town of the Tour de France technical schools were established and maintained by the stonemasons, joiners, and locksmiths."

"Other trades do not appear to have shared in this highly beneficial institution."

"In these schools, which were open in the evening, the workman was taught architectural, lineal drawing, designing, modelling, carving, and the elements of all the sciences connected with his profession."

The companionship was still in existence in the middle of last century, when "Perdiguier," a member, wrote his book on the subject, and it probably remains to this day.

Now we have here clearly defined by Leader Scott and Gould, not only the existence of building fraternities in Tuscany and in France during the Middle Ages, but the organisations and educational system under which they were trained; and, if they are considered impartially, does it not seem difficult to avoid the conclusion that they all had a common origin? And what is equally important is the fact that in Tuscany there was, in mediæval times at least, a headquarters establishment, or grand lodge as it has been termed, comprising schools, workshops, and administration offices; and that this head establishment was occasionally removed from one city to another as those cities became the dominating influence in the state or province in which the lodge was re-established.

If, however, further proof were necessary that technical schools or colleges were built and maintained by the Middle Age building fraternities, we have it in an old lodge building at Florence remaining to the present day, which, although now disused, is almost intact. In the preface to the second edition of *Cathedral Builders*, page xiv, the authoress, after stating that Mr. Speth proves from ancient documents that the masonic assembly rooms had two divisions, chamber and lodge, one for general meetings, while the other was kept for the secret meetings of the guild itself, goes on to say:

"Now in the Florentine Opera del Duomo, which is the only building of the kind I have seen preserved almost intact, these two assembly rooms are distinctly marked. The hall is entered from the staircase, and is a noble lofty room, the chamber has no opening except a small door within the hall,

and even then its secrecy is further protected by a small lobby."

"The laboreria or workshops extend for some distance down the piazza; over one of these Donatello presided."

"In the large inner courts, stones, marbles, &c., were stored."*

(Compare this with the plan of St. Mary's Guild, Lincoln.)

It is further stated that

"There are still existing records of meetings of the lodge, and the subjects discussed, and the names of the Masters and the Council of Administration from year to year."

"The payments to architects, artists and men, the legal contracts and business reports."

"The meetings were always composed of some civic members and some working masters of the lodge."‡

"When the members graduated in the school they became masters of the Guild, and could then undertake commissions."†

It is likewise stated in the preface:

"First: That only a few cities have any remains of an opera, or head establishment of the order, and those are always the cities where there was a large congregation of those sculptor-architects who are distinguished in contemporary documents as *Maistri* (Masters), and that it was their place of assembly."

Lincoln must have had a large number of sculptor-architects at the time St. Mary's Guild was built, and it was in all probability their place of assembly.

"Second: That when this congregation of masters broke up, or removed its headquarters from that city, the Opera was closed and fell into disuse."

(This is what occurred at Florence, and there is every indication of the same thing having occurred at Lincoln, for in 1545 the civic authorities seized upon and confiscated all the plate and money of the Guild to relieve the city from certain liability to the King; since which time it has been closed to the fraternity.)

"Third: That in all cities which preserved the archives of the Opera, we find it managed precisely in the same way: its Council of Administration fairly composed partly of architects themselves, and partly of the ruling powers of the city, its workshops and schools always under the same roof as its assembly room."‡

(See published plan of St. Mary's Guild, Lincoln.)

Such, then, was the educational mode of procedure in Italy and in France, and in no other way does it seem possible for the mediæval architecture of this country also to have been developed and worked out in the successive styles as it was.

I must not, however, overlook the views, hesitating though they be, of so distinguished an authority as Mr. Gould, who, in his comprehensive work on Freemasonry, says:

"On the whole, I should be induced to conclude generally that out of Italy and during the Middle Ages the class whom we call architects did not—save perhaps with very rare exception—exist, and that all the buildings we so much admire were the combined work of certain priests and monks educated specially for the work, in conjunction with their

* Gould's *History of Freemasonry*, vol. i., pp. 196-7 and 223.

† *Ibid.*, pp. 214-19.

* *Cathedral Builders*, Preface, p. xiv.

‡ *Ibid.*, p. 324.

§ *Ibid.*, Preface, p. xv.

† *Ibid.*, pp. 318-19.

master mason, usually attached to the building as at York, and more often by the master mason alone; but that when the latter was the case the master mason was an independent individual.*

Here, then, we have no less than three separate and distinct systems, out of which Mr. Gould suggests that the mediæval architecture was developed and practised in this country (for he excludes Italy) for four hundred years or more; or, in his own words:

"There were three methods or modes of procedure adopted by our English mediæval builders: (1) Where the work was done by the *cementarius* or *latomus*" (*i.e.*, mason); "(2) where the real head was a cleric; (3) where there was a kind of school in which the clerics, or at least some of them, together with their master mason, hammered out the design between them."

And yet Mr. Gould tells us on the same page that

"Gloucester seems to have had a regular school of masons—a kind of architectural college—in which theory was very properly mingled with practice, and from which, according to the best authorities, fan-vaulting took its rise."†

Does not this prove that there did exist a complete system of training for architects and builders at Gloucester, in the fifteenth century at least, which may, however, have been that of a civic guild, because civic guilds were not founded till the last quarter of the fourteenth century?

He likewise says:

"There was also, probably, another but earlier school at Wells."

There are no remains, however, of a college there, nor yet are there any remains of a college building either at Wells or Gloucester.

An architectural college at Gloucester and another at Lincoln would, however, suggest that there were more than one headquarters in England (but this may be fairly doubted, because the unity of the Gothic styles of architecture could not possibly have been maintained under such a double system of procedure). But if "fan-vaulting" took its rise at Gloucester it must have been developed there, which is very probable, for as "fan-vaulting" was not constructed until the last period of mediæval architecture, and at least 250 years after St. Mary's Guild building was erected, and as the civic guilds of that time were gradually absorbing the old building fraternities into their new order, there may have been two head centres in the fifteenth century, one at Lincoln of the old fraternity, and one at Gloucester of the new civic order; or, as Lincoln was at that time very depressed and losing its influence in the country, the headquarters of the old fraternity there may have been transferred to Gloucester, just as the Lucca College was removed to Florence in the fourteenth century. The Wells school, if one ever did exist there, was doubtless a subordinate school, subject to the head college, wherever that may have been situate, for no mention is made of a college at Wells, but only a school.

There is, therefore, nothing inconsistent in the suggestion that the head training college for the arts and crafts of England was at Lincoln throughout the mediæval periods of architecture—neither in the existence of a school at Wells nor a college at Gloucester, and least of all in Mr. Gould's surmise that the designs for our cathedrals and churches were "hammered" out by a cleric and a mason who were engaged on each of those fine buildings; for if they were so hammered out, both the cleric and the mason were, as Mr. Gould admits, "educated specially for the work," and both would, therefore, be members of the guild. If, therefore, there were schools attached to the lodges of Tuscany and France, which cannot be doubted, and if those places were the sources from which we received the elements of our mediæval arts, which is equally certain, does it not seem reasonable to conclude that a similar school and system of training for masters would be established in this country? It is quite probable, however, that there were other schools besides that of the headquarters of a subordinate character attached to the temporary wooden domiciles or lodges which are known to have been constructed for the accommodation of the workers, on the sites of the buildings on which they were engaged, similar to those which were erected at St. Albans and at Westminster and Durham Cathedrals and other places, and that the apprentices and workmen were trained in them. These subordinate schools, like those of the "Tour de France," would probably be open in the evenings, and instruction be given in them by the qualified masters engaged upon the works.

Those qualified masters were required to assemble periodically—once or twice a year—at the head college to confer with the officers of the Grand Council, as the following rules from the Old Charges of British Freemasonry seem to prove:

CONCERNING THE MASTER MASON. 16TH CENTURY.

Article No. 2.—"Most ben at the generale congregacyon to know where it schal be holde." *

And from a document of the seventeenth century:

Rule XVI.—"And also that they should come and assemble themselves together once every year. That they might take advice and Councel together how they might work best to serve their Lord and Master for his profit and their own credit and honestie, and to correct amongst themselves him or them that erred and trespassed, and thus was the craft or science of Geometrie grounded there." †

CONCERNING THE CRAFTSMEN.

Article No. 3.—"Apprentices to keep their maysters Counsel in chamber and yn logge."

Article No. 12.—"The decisions of the Assembly to be respected or imprisonment may follow."

Article No. 15.—"And obey the Assembly on pain of having to forsake the Craft and be imprisoned." ‡

There was, therefore, a separate code of rules for

* Gould's *History of Freemasonry*, vol. i., p. 320.

† *Ibid.*, p. 314.

* Gould's *History of Freemasonry*, vol. i., p. 82.

† *Ibid.*, p. 96.

‡ *Ibid.*, p. 83.

governing the masters from that which governed the ordinary craftsmen, and we gather from them that the masters only were required to attend the assembly or grand lodge.

It may, however, be contended that it was a system much too elaborate and comprehensive for the times of which we are speaking, and far beyond the powers and abilities of craftsmen of the Middle Ages; and if the Council of Management had consisted of the ordinary working men, it certainly would have been beyond their capacity. But when we consider that in the periods to which we are referring the chief occupation for peaceful men was in agriculture and building, and that building was the only outlet for superior skill and ability (except, of course, in the priesthood and literature), it will be readily admitted that the designing of buildings and working in the arts were honourable occupations, in which the superior classes engaged and in which the priests sometimes indulged; and statesmen also, and even princes, are known to have occasionally acted on the Grand Council of the fraternity. This Grand Council appears to have governed all the other lodges.

The governing body of this incorporated society was therefore composed of men of superior skill and intelligence, who had graduated in the arts and sciences of the periods, and were consequently quite capable of organising and working such a system, which, after all, was nothing more nor less than that which prevailed in the Tuscan lodges at the same times.

The Administration Council appears, in fact, to have been a body of men, not merely of college dons, banded together for the purpose of cultivating the arts and developing architecture, although that was an important part of their duties; but they were a trading Board of Directors also, and as such they controlled all the departments of the fraternity, including those managed by the masters who were charged with the superintendence of the large buildings they were erecting in different parts of the country. Such a supervision would at that period necessarily require the periodical attendance of all those qualified master at the regular assemblies of the Council, to report progress, to confer together, and to assist in framing the decisions of the Council which were to guide those masters in their future actions.

The Grand Council, indeed, appears to have been an autocratic body, monopolising a business with which none others were permitted to interfere, and which therefore enabled them to dictate terms to their patrons and to fix the wages the men should receive; and to enforce their demands they sometimes called off their men and struck work altogether,* in the most approved modern fashion, just as Trade Unionists do to-day.

Up to the time of the Norman Conquest of 1066, however, the predominant influence that had impressed itself upon architecture in Britain was that established by the Romans; for although the rough and uncouth Saxons supplanted the Romans in Britain, they possessed no taste themselves for the finer arts in building, but finding the Roman colleges here they did not disturb them, for, in the terms of Mr. Coote, "In the cities in which they flourished they left them to the Romans to make such use of them as they pleased."

The Conquest, however, entirely changed the old conditions under which the British had hitherto existed, for important buildings were almost immediately afterwards erected in all parts of the country, and it is admitted by all the experts on the subject that the architects and craftsmen who commenced that great change were the Normans. They infused a new spirit into our people: they replanted the arts and sciences (which had slumbered here for centuries) in British soil, where they germinated and were developed by the British themselves, in a little more than a century, into a new style of architecture, with characteristics of its own, that has left it in a unique position in Europe to the present day; and it is especially interesting to remember that this new style was developed at Lincoln, and that it was first applied in the architecture of St. Hugh's portion of Lincoln Cathedral.

That the old building fraternities did control even the minutest forms of architecture in this country, as well as the general designs and principles of construction in the respective periods during which the architectural styles prevailed, is shown by Mr. Gould and also by Mr. Wyatt Papworth in his "Notes on the Superintendents of English Buildings in the Middle Ages," in which he says that the fabric rolls of York Cathedral of the sixteenth century contain in the Old Charges this rule:

"And also that noe mason make moulds nor noe square nor no rule to any lyer within the Lodge nor without the Lodge how to mould stones without noe mould of his own making."*

And, again, from rolls dated 1670:

"You shall not make any mould square or rule to mould stone withal, but such as is allowed by the fraternity."†

These rules clearly prove that the mouldings which enrich architecture (and which are the chief characteristics of the various styles of the buildings of the Middle Ages, and by which the date of their construction can still be determined) were designed by experts of the fraternity, and that their forms were controlled by them in the sixteenth and seventeenth centuries; and the reasonable inference is that the rules of those centuries were a continuation of regulations which had governed the fraternity all through

* Wyatt Papworth, *Transactions R.I.B.A.*, 1887, p. 224; also Gould's *History of Freemasonry*, vol. I., p. 201.

* Gould's *History of Freemasonry*, vol. I., p. 100.

† Wyatt Papworth, *Transactions R.I.B.A.*, 1887, p. 221.

the mediæval periods, and probably through all the other architectural periods from the foundation of the College of Builders.

But these characteristics of the styles which exist in all the mediæval buildings in Britain to the present day could not possibly have been developed under modern conditions, notwithstanding that our building artizans are better educated and more enlightened than the mediæval workmen could have been. How, for instance, could such buildings as Kirkstall, Fountains, Darlington Church, Llantony, the Entrance to the Chapter House, St. Mary's York, a portion of Selby Abbey Church, and St. Mary's Guild buildings at Lincoln, together with dozens of similar buildings in different parts of the country, each so far away from the others, have been built in the same style, with characteristics of the period between 1150 and 1190, as those buildings were, unless all the architects who designed them had been trained in the same schools and workshops, and by the same tutors, where those characteristics were taught and developed?

Take any seven well educated architects of the present day, all trained in the various styles of architecture now existing, and send them to the places just mentioned, one to each, with a commission to design and superintend the construction of an important building there. Can it be imagined for a moment that each of those buildings when completed would contain features in perfect harmony with all the other six, and that the whole of them would be so characteristic of the period in which they were erected as to be recognisable as such by experts in architecture seven hundred years hence? Such a thing would, of course, be absolutely impossible; neither was it possible for the architects of those mediæval buildings to have been separately taught and trained by different tutors in schools or colleges far apart in the country, and to have developed and maintained universal styles in architecture as they were developed and maintained throughout Britain in the respective periods. Then in what other way than that suggested could our mediæval architecture have been developed?

There is yet another very curious fact which lends credence to the suggestions about St. Mary's Guild—namely, that many master masons and other craftsmen of the mediæval periods bore place-names of this county and neighbourhood, which in itself suggests that they were Lincolnshire men trained in this college. Appended is a list:

NAMES OF MASTERS AND OTHERS WHO MAY HAVE BEEN TRAINED IN ST. MARY'S GUILD, OR IN SCHOOLS ON THE WORKS AT WHICH THEY WERE ENGAGED.

Papworth, Journ. R.L.B.A., Vol. for 1887, p. 195.—Elyas de Derham, in the adjoining County of Norfolk, engaged on Winchester Hall. Twelfth century.

Gould, p. 279.—Robert de Lyndsay (Lincolnshire), said to have designed the west front of Peterborough Cathedral. 1200–1222.

Papworth, p. 195.—William de Burgh, Windsor Castle, succeeded Water de Burgh, Lincolnshire. 1240.

Papworth, p. 209.—Richard de Gaynisburgh, Lincolnshire, Lincoln Cathedral. Thirteenth century.

Papworth, p. 209.—Richard de Stow, Lincolnshire, contracted for the tower, Lincoln Cathedral. 1306.

Papworth, p. 192.—William de Stow, Lincolnshire, built the steeple of Evesham Abbey, Worcestershire. 1319.

Papworth, p. 197.—William de Kelleseye, Lincolnshire, St. Stephen's Chapel, Westminster. 1329.

Papworth, p. 197.—John de Feryby, Lincolnshire, held office in same place as last in same year. 1329.

Papworth, p. 213.—Thomas de Loudham, adjoining County of Notts, first master mason, York Cathedral. 1347.

Papworth, p. 192.—John de Lincoln, Master at St. Stephen's Chapel, Westminster. 1350.

Papworth, p. 187.—Robert de Benham (? Burnham), Norfolk, supervisor. 1351.

Papworth, p. 210.—Geffrey de Carlton, Lincolnshire, at Windsor Castle. 1359.

Papworth, p. 197.—William de Sleaford, Lincolnshire, Surveyor and Clerk of Works, St. Stephen's Chapel, Westminster. 1361.

Papworth, p. 209.—John Wisbeach, adjoining county, at Ely Cathedral in fourteenth century.

Papworth, p. 198.—Henry de Mansfield, Nottinghamshire, was at Chilleriengley. 1370.

John de Godney, Lincolnshire, Clerk of Works, Westminster. 1391.

Papworth, p. 215.—Mr. Robert Spyllesby, Lincolnshire, appointed Master Mason for life to York Cathedral in 1466.

Papworth, p. 213.—John Petit of Wellingborough, Lincolnshire, tendered to build Coventry Cross. 1543.

Papworth, p. 212.—John Cole was Master Mason of the broach of Louth Church, Lincolnshire. 1501.

If, therefore, this St. Mary's Guild was not the headquarters of the mediæval builders, what was it built for?

It is said in Dr. Sympson's *History of Lincoln* that it was often referred to (in old documents) as simply the "Great Guild."

The late Precentor Venables, than whom no one knew Old Lincoln better, says in his *Walks through Lincoln* that it was a "Semi-religious semi-mercantile foundation." But of what class of merchants the fraternity was composed, however, there is no record.

Now the building fraternities of the Middle Ages were precisely what the Precentor designates them to have been, and as they generally had an altar in a neighbouring church* dedicated to the patron saint of their local fraternity, is it not possible—nay, probable, that this Guild had an altar in St. Andrew's Church, which then stood on the other side of the street exactly opposite to this Guild?

But there are still further reasons that support the suggestion that this was the college of the fraternity. It might be said, for instance, that if the fraternity had at that time a school with workshops in Lincoln it would have built them on the hill near the large works on which they had been engaged for some years in erecting the Conqueror's Castle and Remigius's Cathedral, both of which were in progress long before St. Mary's Guild was built. But there was no room on the hill for this building within the precincts of the old Roman Colony, for it is an historical fact that something like 240 houses were demolished

* *Gould's History of Freemasonry*, vol. i., p. 193.

to make room for those two important buildings; and besides this there was a great fire, in 1123, which burnt nearly the whole city, and the inhabitants were consequently forced down hill into Wickenford, where St. Mary's Guild still stands.

May we not therefore summarise the subject thus?

That as there was in Italy and France all through the mediæval times an organised fraternity of builders exclusively devoted to architecture, and as France received the elements of the arts and sciences connected with building from Italy, so the French transmitted them to England immediately after the Norman Conquest.

That a similar system of training in architecture to that which prevailed at Tuscany in mediæval times was introduced into France (probably by Abbot William, who was a Lombard by birth, a man well versed in the liberal arts, and who founded forty monasteries in Normandy at the end of the tenth or beginning of the eleventh century*), and from there it was brought into this country by the Normans after the Conquest.

That as Lincoln at the time was an important city, the second in the country, and as the Cathedral and Castle were in course of construction there, as well as dozens of other important churches and castles in the neighbourhood immediately surrounding it; and as the diocese was the largest in the Kingdom, Lincoln would naturally be selected as the place in which to establish a training college for the fraternity.

That as the building of St. Mary's Guild was in plan identical in arrangement and accommodation with Leader Scott's description of the Florence Lodge, it is but reasonable to believe that it was erected for a similar purpose.

That the organisation of the English fraternity consisted of a Grand Council similar to that in Tuscany, composed of master masons who had graduated in the arts, with probably a few important personages or civic authorities associated with them similar to that in Tuscany.

That only those who had graduated as masters at the head college were permitted to design and take charge of the construction of important ecclesiastical buildings, hence the unity of style in our Gothic architecture.

That the ordinary craftsmen and working apprentices were taught and trained by the masters entrusted with those large works, in the subordinate lodges or wooden domiciles attached to the important buildings on which they were engaged.

That the Grand Council assembled at the head

college once or twice a year to report progress, to confer together, to settle all difficulties which may have arisen in the past, and to give instructions to those masters who were responsible for the buildings they were carrying out in other parts of the country.

That there was then as now a double system under which those great works were executed—that is, they were in a large proportion of instances paid for as "stuff and time." In a few cases, however, the buildings were constructed under contracts for definite sums, but in all the great important works the architecture was designed and controlled by the first or chief "master mason," who in his turn was responsible to the Grand Council of the fraternity of which he was himself a member.

The underlying principles of the arts and the characteristics of the styles of architecture would be well developed under such an organised system of management as that described, and also be disseminated among the respective places where important works were being carried out.

Unless we are, therefore, prepared to treat all these circumstances, and especially the facts of those distinguished authors from whom I have so freely quoted, as unreliable and misleading—which but few will be prepared to do—it seems difficult to avoid the conclusion that there did exist all through the mediæval periods a well-organised corporate body of builders, whose masters were thoroughly versed in the science of building and the principles of the arts, qualifications that could only have been acquired under a system of training in schools and workshops similar to those which existed in Tuscany and France at the same periods, and that those masters were trained and graduated in them as doctors graduate to-day. And are we not also forced to believe that those masters moved from place to place, to where their services were required, and that they took charge of the important buildings in course of erection there, and for the carrying out of which in accordance with the rules and regulations of the fraternity they were held responsible to the central authority?

If, then, we are so convinced, may we not likewise conceive the necessity there was for such important buildings as those of St. Mary's Guild? And as these buildings were originally in plan and accommodation precisely similar to the existing Florence Lodge, and as no other building remains in England, or has ever been known to exist here, that can compare with it in that respect (at least, so far as I am aware), I repeat the suggestion that the headquarters of our English mediæval building fraternity were established in this Guild building at Lincoln.

Lincoln, 12 January 1914.

* *Cathedral Builders*, p. 123.



9 CONDUIT STREET, LONDON, W., 14 Mar. 1914.

CHRONICLE.

A New Colonial Allied Society.

At the General Meeting last Monday the Chairman announced that the Council, acting under By-Law 78, had admitted the Queensland Institute of Architects to alliance with the Royal Institute.

The Queensland Institute was founded in 1888, its objects being the advancement and elevation of architecture as an art, the promotion of friendly intercourse and maintenance of a uniform system of practice among its members, and the protection of the public against unqualified practitioners. There are four classes of members—Fellows, Associates, Students, and Honorary Members. The subscribing members number 23 Fellows and 12 Associates, practically every practising architect of any standing in Queensland being included.

The affiliation of the Queensland Institute completes the alliance with the parent body of the architectural societies of all the continental States of the Australian Commonwealth, and, with the Royal Canadian Institute, the New Zealand Institute, and the three South African Institutes, the Royal Institute of British Architects now possesses an organisation which may be said to embrace practically the whole of the self-governing dominions of the Empire.

London Arterial Roads.

The President of the Board of Trade and the President of the Local Government Board were present on Monday afternoon at the North-Eastern Sectional Conference, held at the offices of the Local Government Board, on the question of arterial road communication in Greater London. It was the first of six sectional conferences to be held on the subject, and delegates were present from the local authorities in the district, as well as representatives of the Local Government Board, the Board of Trade (Traffic Branch), the Road Board, the Royal Institute of British Architects, and various societies represented at the original conference in November.

Mr. Burns said that this was the third gathering in London within the past few months on the subject of arterial roads from London. North-East London, with which the first sectional conference was concerned, had increased enormously in population of

late. Some of its roads were very wide and very good, and in many cases well maintained, but there were intersecting portions that should be dealt with. They asked the members of the conference representing that great district to come to some sort of agreement first as to whether additional main roads were desirable in the area, and, if they answered that question in the affirmative, to determine where those roads should be. Secondly, should the existing roads be widened or diverted, and, if so, where, when, and how? Thirdly, was it not possible through the adoption of town planning schemes forthwith to hold the vacant land which now existed on either side of the existing narrow roads—and which could be secured at a low price because it was vacant—for future widening or for new roads? It was possible that if the representatives of the various interests concerned got together they would be able to come to an agreement by means of which a great deal could be done at comparatively little cost. The more courageous they were, the more likely they were to get the landowners, the Port Authorities, and others to co-operate with them in the work. In the construction of roads a margin of land should be left to be converted into wider metalled roads as the traffic grew. For 18 years on the County Council he had many opportunities of seeing the enormous waste of public money that ensued from the lack of foresight in these matters and in even allowing one building to project 20 feet beyond what should have been the ultimate line of frontage. A short strip of ground in front of a public-house in Fulham Road which was needed for the widening of that road cost the County Council something like £500,000 per acre.

Mr. Samuel, in addressing the conference, said the decisions of the conference would not in any way commit the local authorities or other bodies of which they were representative to a course of action, but must necessarily be referred back to the constituent bodies before any definite action was decided upon. The situation was likely to be altered in the very near future by the assumption by the Imperial Exchequer of a very considerable part of the cost of main roads. Proposals on those lines the Government intended to lay before Parliament in the present Session. The Government Departments concerned would gladly give the conference all the assistance in their power.

Mr. Alderman Regester, chairman of the Middlesex County Council, afterwards took the chair, and various proposals were discussed.

The conferences were continued on Tuesday and Wednesday.

The following representatives of the Institute were present:—

Mr. W. R. Davidge [A.], North-East District Conference, on 9th March.

Mr. H. V. Lanchester [F.], North-West District Conference, on 10th March.

Mr. Paul Waterhouse [F.], South District Conference, on 11th March.

The R.I.B.A. Schedule of Charges.

The results of the adjourned debate on the draft Schedule of Professional Charges at the Institute last Monday will be found recorded in the Minutes published in the present issue. This was the fifth meeting which has been devoted to the consideration of the subject, and there still remain ten clauses to be got through. These, however, are perhaps less debatable than the earlier clauses, and it is hoped that one more meeting, the date of which will be shortly announced, will see the conclusion of this business.

The American Schedule.

Proposals for the revision of the American Schedule are at the present moment under consideration by the American Institute of Architects. The Committee in charge of the matter, consisting of Mr. R. Clipston Sturgis (the new President of the Institute), Mr. Irving K. Pond, and Mr. Joseph C. Llewellyn, in a recent report commented upon the illogical character of the existing Schedule in that it does not meet the special needs of the times. The demand is for a more definite statement of the fee in cases where more than the six per cent. minimum is chargeable; for the establishment of a fee of less than six per cent. for buildings of a simple type of construction; and for a graduated scale running from a higher fee for work of lesser cost to a lower fee for work of greater cost. To meet these requirements the Committee have formulated a Schedule which it presents to the Institute, to quote the words of the report, "for its careful consideration and criticism, and possible, though at present hardly probable, adoption." A former member of the Committee, Mr. Robert Maynicke, now deceased, had been opposed to an extensive revision of the Schedule, in view of the effect such revision might have upon the Courts. But it is the opinion of the majority of the Committee "that the Courts will soon recognise and enforce whatever may appeal to them as a fair, reasonable, sound, and logical Schedule, and it is just such a Schedule that the Institute desires to promulgate—and no other." The report continues:—

If the Courts or the Institute desire precedent, the Committee presents France, with her graduated scale; Germany, with a detailed classification of buildings to which graduated scales are applied—a certain percentage on the structural part and a higher percentage on the artistic features—a Schedule subdivided with the most detailed minutiae; England, with a graduated scale for work costing up to \$12,500, and from there on a flat rate of five per cent. . . . While the German Schedule shows the ultimate in logical development, it seems to this Committee to be too detailed to be more than suggestive to us. The new Schedule of the R.I.B.A. is really more detailed than that presented by your Committee. The service furnished by the architect under the five per cent. of the English Schedule is considerably less than is expected from an architect in the United States under our six per cent. minimum, and rates are fixed for the extras which enter in to make up the full complement of the architect's services.

The Committee's suggested Schedule is as follows:—

1. The architect's professional services consist of the necessary conferences, the preparation of preliminary studies, working drawings, specifications, large-scale and full-size detail drawings, and of the general direction and supervision of the work.

2. The architect's charge shall be based upon the total cost (or in case of discontinuance or abandonment, upon the estimated total cost) of the work. Total cost is to be interpreted as the cost of all materials and labour necessary to complete the work, plus contractors' profits and expenses, as such cost would be if all materials were new and all labour fully paid at market prices current when the work was ordered.

3. The minimum charge for work of a particular type and cost is as given in the following tables and notes:

TABLE A.

LOFTS, FACTORIES, WARE- HOUSES, POWER-HOUSES.		PUBLIC AND PRIVATE WORK GENERALLY.	
Cost.	Per cent.	Cost.	Per cent.
\$20,000	5.5	...	6.5
30,000	5.4	...	6.4
40,000	5.3	...	6.3
50,000	5.2	...	6.2
75,000	5.1	...	6.1
100,000	5.0	...	6.0
150,000	4.9	...	5.9
200,000	4.8	...	5.8
250,000	4.7	...	5.7
300,000	4.6	...	5.6
350,000	4.5	...	5.5
400,000	4.4	...	5.4
450,000	4.3	...	5.3
500,000	4.2	...	5.2
750,000	4.1	...	5.1
1,000,000	4.0	...	5.0

RESIDENCES.			
Cost.	Per cent.	Cost.	Per cent.
\$10,000	8.0	\$100,000	7.4
20,000	7.9	150,000	7.3
30,000	7.8	200,000	7.2
40,000	7.7	250,000	7.1
50,000	7.6	300,000	7.0
75,000	7.5		

MONUMENTS, FIXTURES, FURNITURE, CARPENTRY WORK, ETC.			
Cost.	Per cent.	Cost.	Per cent.
\$100	20	\$2,000	15
300	19	3,000	14
600	18	5,000	13
1,000	17	7,500	12
1,500	16		

For alterations in existing work the fee should be twice that for new work of the same cost, the owner furnishing measurements and other necessary data.

When the cost falls between any two consecutive figures in the cost columns the higher percentage shall be used in computing the fee, but such fee shall not exceed that set down as proper for the higher of the two figures. In public work, in which the architect is forced to modify his practice in accordance with special laws or departmental rules, the minimum fee shall be determined by the following:

TABLE B.

On work costing up to \$100,000 the fee shall be that determined by Table A, under "Public and private work generally."

	Per cent.
From \$100,000 to \$1,000,000...	6.0
" \$1,000,000 to \$2,000,000...	5.8
" \$2,000,000 to \$4,000,000...	5.6
" \$4,000,000 upward	5.5

4. When two or more buildings are erected from the same plan, at the same time, in the same locality, the fee shall be based upon the total sum of the costs, except that the charge for supervision should be determined by multiplying the fee for the supervision of one building by the number of buildings erected.

5. The following table will indicate a proper division of the total fee in relation to the various services rendered :

TABLE C.

Services.		Corresponding values in tenths of total fee.	
Preliminary Studies	Preliminary sketches sufficient to judge the scheme ...	1	
	Fully developed preliminary sketches ...	1 + .05	
	Working drawings ...	.35	5
	Full-size details ...	.05	
	Specifications ...	.15	2
	Preparing and letting contracts ...		
	Supervision ...		3
	Auditing accounts ...		

6. The architect is entitled to compensation for articles purchased under his direction, even though not designed by him.*

7. If an operation is conducted under separate contracts rather than under a general contract, it is proper to charge a special fee in addition to the charges mentioned elsewhere in this schedule.*

8. Where the architect is not otherwise retained, consultation fees for professional advice are to be paid in proportion to the importance of the questions involved and services rendered.*

9. The total cost upon which the minimum charge is based includes the cost of such structure, and such heating, ventilating, sanitary and electrical equipment as shall serve the normal purposes of the building as such. Should special equipment to serve the needs of special uses or occupancy be desired, the architect is entitled to an extra fee for designing and supervising the installation of such equipment ; and if the services of experts are demanded by the owner, said owner shall pay for them. Chemical and mechanical tests and surveys, when required, are to be paid for by the owner.

10. Necessary travelling expenses are to be paid by the owner.*

11. If, after a definite scheme has been approved, changes in drawings, specifications, or other documents are required by the owner, or if the architect be put to extra labour or expense by the delinquency or insolvency of a contractor, the architect shall be paid for such additional services and expense.*

12. Payments are due to the architect as the work progresses, and in accordance with the sub-divisions given in Table C, excepting that the fee for supervision is to be spread over the entire period of the work, the final one-tenth of the fee being due when the final accounts are audited. Until an actual estimate is received, charges are to be based upon the proposed cost of the work, and payments received are on account of the entire fee.

13. In case of the abandonment or suspension of the work, the basis of settlement shall be in accordance with the apportionment made in Table C.

14. The supervision of an architect (as distinguished from the continuous personal superintendence, which may be secured by the employment of a clerk of the works or superintendent of construction) means such inspection by the architect or his deputy of work in studios and shops or a building or other work in process of erection, completion or alteration, as he finds necessary to ascertain whether it is being executed in general conformity with his drawings and specifications or directions. He has authority to reject any part of the work which does not so conform and to order its removal and re-

construction. He has authority to act in emergencies that may arise in the course of construction, to order necessary changes, and to define the intent and meaning of the drawings and specifications. On operations where a clerk of the works or superintendent of construction is required, the architect shall employ such assistance at the owner's expense.*

15. Drawings and specifications, as instruments of service, are the property of the architect.*

Great Northern Terminus : Prize for Design of Improved South Front.

Mr. Paul Waterhouse, in his Paper on London Railway Stations [JOURNAL, pp. 241-256], referring to the Great Northern Railway Station at King's Cross, said that "a more striking combination of vigour with ability than the south elevation of this terminus could hardly be found among the street sights of London. In the sheer strength of direct purpose the engineer flung up those two Cyclopean arches, and in between them he set out to design an architectural climax which should unite and crown the whole design ; the result was failure—he turned his drama into a farce. I would guarantee that the offer of a prize of five guineas to architectural students under twenty-five would produce more than one good scheme for raising this elevation to nobility at a cost of under £500." The *Architects' and Builders' Journal* proposes to test in practical fashion Mr. Waterhouse's suggestion by offering a first prize of five guineas, and second and third prizes of two guineas and one guinea respectively, for the best designs for an improved King's Cross, to cost not more than £500. Mr. A. E. Richardson [F.] is to be the Assessor. Full particulars appear in the current issue of the *Architects' and Builders' Journal*.

The London Society.

The Annual General Meeting of the London Society was held at the Mansion House on Wednesday the 4th inst., the Lord Mayor presiding at first, and afterwards Lord Hambleden.

The Lord Mayor reminded the meeting that the object of the Society was to draw together all lovers of London, whether their interest lay in preserving its old charms or in influencing new developments, and to build up a strong public opinion by means of which Londoners could bring their influence to bear upon matters of artistic, antiquarian, and practical interest. Referring to the proposed new bridge across the Thames, he said that it was important that it should be a thing of beauty as well as utilitarian, and any recommendation made by the Society to the Corporation concerning it would receive careful consideration.

The Archdeacon of London, in proposing a vote of thanks to the Lord Mayor, alluded to two City buildings which, he said, seemed to be in danger—St. Paul's Cathedral and the Church of St. Vedast, Foster Lane. The Cathedral required a great deal to be done to it, and unless immediate precautions were taken its future stability would be imperilled. The Church of St. Vedast, since the demolition of the old Post Office Buildings, gave a view of beauty in

* These clauses are in the existing Schedule.

the midst of business, and that view also should be preserved, but he feared that unless they were vigilant the projected new roadway to Liverpool Street would go right through the Church of St. Vedast.

Sir Melvill Beachcroft, in seconding, said they felt that the great metropolitan Cathedral was quite safe in the hands of the City authorities and that they would see to it that that inheritance was handed down to posterity in a sound and solid condition. He could not pass Trafalgar Square, that dreary waste of drab asphalt, without wondering whether Paris or any other capital in the world would long allow that magnificent centre—the hub of the capital of the Empire, if not of the world—to remain in such a grossly uninteresting condition as it was to-day. Referring to the Mall Approach, he said there was reasonable ground for hoping that at last there would be an appropriate approach to the avenue, and he hoped that eventually there would be an appropriate statue at the entrance to the Arch.

The Annual Report, the adoption of which was moved by Lord Hambleden, records a steady increase in membership, 154 new subscribing members having joined between 1st January and 31st December 1913. A brief résumé is given of the action taken by the Society in connection with the Mall Approach, Main Roads and Town Planning, St. Peter's Square, Hammersmith; North Street and Smith Square, Westminster; the Preservation of Boswell's House, Great Queen Street, St. Martin's-le-Grand, the Westminster Hospital Site, and Regent's Quadrant. Fuller details are published in the Society's Journal. Mr. W. H. Dickinson has consented to act as Chairman of the newly-formed Parliamentary Committee. The report states that excellent work has been accomplished by the various Committees: the Streets Committee (Mr. Edwin T. Hall, Chairman), the Open Spaces Committee (Mr. Raymond Unwin, Chairman), the General Post Office Site Committee (Mr. Arthur Crow, Chairman), the South Side Committee (Mr. Paul Waterhouse, Chairman), the Town Planning Committee (Professor Adshead, Chairman).

On the motion of Sir Aston Webb, R.A., Lord Plymouth was re-elected President.

The Roof of Westminster Hall.

In the House of Lords on the 10th inst., Lord Southwark asked the First Commissioner of Works whether he could give any information as to the condition of the roof of Westminster Hall, and an estimate of the time which its repair was likely to take.

Earl Beauchamp said inquiries had been made at some length into the question of the stability of the roof of this national possession, and many authorities on the historical and archaeological side had been consulted. The existing roof was not part of the original structure erected by William Rufus, but was constructed by Richard II. at the end of the fourteenth century. At various times since 1663 repairs and alterations had been made in the roof, including the

substitution of slates for lead some time between 1760 and 1782. When the care of the Hall was transferred to the Ancient Monuments Branch of the Office of Works in March, 1912, it was decided to undertake a thorough examination of certain representative trusses and bays. A very serious state of decay was found to exist throughout the whole of the portion of the roof examined. This decay was due almost entirely to the ravages of the larvæ of an anobiid beetle, known as the *Xestobium tessellatum*. The effects of dry rot were also recorded, but this did not amount to serious dimensions. The most dangerous result of the depredations of the larvæ appeared to be due to the fact that in almost every instance the timbers had been attacked at their main structural points, and in numerous cases the junctions of these great timbers had been hollowed out to the merest shell. Had the construction of the roof not been scientifically sound many of the trusses would undoubtedly have fallen. It had been decided to attempt a scheme of strengthening which would preserve every vestige of sound timber now existing, and this method would necessitate a scheme of steel reinforcement. The steel structure would be practically invisible from below and would secure for a vast number of years every separate timber in the present structure. The work would be of considerable difficulty and was certain to be costly, but until one bay had been successfully treated it was impossible to frame a firm estimate for the whole of the proposed works. A sum of £10,000 had been inserted in the Office of Works estimates for the coming year. With reference to the preservation of the timbers from further attacks by the larvæ a small committee of experts had been assisting with their advice, and it was expected that the results of their deliberations would give a method of treatment which would satisfactorily deal with the problem of this insect.

Proposed Ministry of Art in the United States.

In connection with the suggested establishment of a Ministry of Art in this country, it is of interest to recall the resolution passed by the International Congress of Architects, Vienna, 1908, which received the hearty support of artistic organisations representative of some eighteen different nationalities. The resolution was in the following terms:—

"That every Government be urgently requested to establish a Ministry of Fine Arts, or at least a section which shall deal with subjects relating to Fine Arts. To such a Ministry or section shall be attached artists of established reputation. Since architecture can be considered the leading art, architects shall be in a majority."

A Committee of the American Institute of Architects reporting on this question has put forward the following reasons for the formation of such a Ministry:—

The common desire of every race in every period of its history to preserve and guard artistic treasures, evidences

the instinct for beauty and the inspiration for immortality. The permanency of works of art is a sufficient reason for extraordinary care in their design and execution. When such works are undertaken by a Government, a high standard of excellence becomes a civic obligation.

It is the duty of the State, itself a product of the cultured need of humanity, to recognise and foster the culture of the arts, as the most powerful agency for uplifting and elevating the ethical standard of the people.

It is our duty to ourselves, to our forefathers, and to posterity to see that the monuments which we are now erecting, these records which our Government is now making, should be worthy representations of the true state of our social conditions and an evidence of the taste and cultivation of our time.

To those who recognise these facts should be entrusted the guidance of legislation concerning our monuments. It is their duty to demand that the expenditures of these enormous sums of public money should be made with all the wisdom, foresight, and intelligence of which we, as a community, are capable.

The intention of establishing a Bureau of the Fine Arts is, not to develop a national style of architecture or definite styles of painting or sculpture, but to invest the whole subject of the fine arts with appropriate dignity, to encourage the establishment of proper schools, to stimulate the Universities in this much neglected branch, and to educate the people.

In other words, the purpose of the Bureau of Fine Arts would be to propagate the truth that art is not an effeminate luxury, but that it is the manifestation of that great vital force, the imagination, which is the original impulse behind all human progress; and, furthermore, to teach the people that if there is one thing above all others which is absolutely and universally democratic, typically and thoroughly American, and essentially in accordance with the whole spirit of the Constitution, it is the inalienable right of all the people by inheritance to possess and preserve the works of genius of the human race, and to participate equally in the inestimable advantages and benefits of the study of the fine arts.

At the Annual Convention of the American Institute of Architects, held last December, the Washington Chapter presented a Bill for the creation of a Government Bureau of Buildings and Grounds, with the request that the Convention approve and urge the adoption of the measure.

The Bill provides for the establishment of a Bureau which should represent the United States Government in (a) all matters relating to architecture, painting, sculpture, and park work; (b) all matters pertaining to education in the Fine Arts; (c) all matters pertaining to the collection and administration of the National Galleries of the Fine Arts.

The duties of the Bureau would be to select by competition the design for buildings, monuments, and statuary, and conduct all business relating to their construction, to the selection of sites, treatment of landscape, and maintenance. It should select the furniture, lighting, fixtures, and decorations, painting, statuary, and other objects of art purchased or presented to the Government; conduct a travelling loan system of Educative Art with museums throughout the country; and foster and disseminate useful knowledge to schools, colleges, and universities on matters pertaining to the Fine Arts.

The Bill provides for the appointment of a Director, of experience in building and landscape, at a salary of 5,000 dollars a year; of three assistant Directors,

qualified in this work, at 4,000 dollars a year each—one to be in charge of buildings and landscapes, one in charge of painting and sculpture, and one in charge of educational and museum work. These Directors to be appointed by the President by and with the advice and consent of the Senate.

All work of the character mentioned in the Bill at present carried on in various Government Departments would be under the conduct of this Bureau, in consultation with the Department directly interested in the project.

The existing National Fine Arts Commission, it is proposed, should be a superior council, whose decision on matters of design would be binding on the Directors of the Bureau.

St. Mark's, Venice: Recent Restorations.

An interesting communication from Mr. Horace F. Brown appeared in *The Times* of the 23rd ult. giving details of the work of repatriation recently carried out on the graceful pavilion of S. Alissio, which adorns the north-west angle of the façade of St. Mark's, Venice. The work has been in progress since April 1907.

We must bear in mind (says Mr. Brown) that the whole angle of S. Alissio is really detached from the main body of the church by the narthex or atrium; it forms part of the external structure and decoration of the façade. Like so much of the building of St. Mark's, the S. Alissio angle has for long given cause for anxiety. As early as 1780 an official report speaks of it as "the falling angle" (*il cadente angolo*), and states that it had been secured from ruin by an iron binder and tie-rod let into the main wall of the church.

But this palliative operation did not arrest the gradual settlement of the foundations and the slow disintegration of the brick walls behind the veneer of marble and mosaic, the true causes of weakness and danger. The angle presented a great and growing deflection from plumb, especially in the middle order, where the exquisite Byzantine capitals of the clustered columns showed signs of splitting under the oblique movement and pressure; the mosaics of the inner cupola of the narthex behind the angle pavilion, where the tie-rod passed into the main wall, were rent and cracked, clearly indicating an outward drag; the gnomon of the sundial on the sustaining column of the edifice no longer marked the meridian; the whole angle was slowly detaching itself from the main body of the building. In 1904 the churchwardens of St. Mark's appointed a commission to report on the steps necessary to save the S. Alissio angle and other portions of the church in similar danger.

The chief causes of the mischief were, as I have remarked, the settlement of the foundations owing to the nature of the subsoil of Venice and the flimsy character of the original work, as revealed by the recent operations; and secondly, the disintegration of the brick walls due to defective mortar and badly-baked brick. The inferior quality of the mortar has been accounted for by the fact that the Republic at the date of these buildings had not yet acquired her hold over the mainland, and was therefore cut off from supplies of good lime and freshwater sand. However that may be, these two causes of mischief, defective walls and weak foundations, had, by the middle of the last century, made restoration of the work of the south façade and a part of the north, looking towards S. Basso, imperative.

The work was entrusted to the architect Meduna, and though his treatment of the external and decorative part, by the substitution of new marble for the ancient veneer he was compelled to remove in order to reach the brickwork, is most deeply to be deplored, yet his handling of the foundations

was masterly, as is fully proved by the structurally satisfactory condition of the southern façade and the angle of S. Sofia. Unfortunately Meduna's operations on the north façade were confined to the central portion, leaving the angle of S. Alissio and the minaret towards the Patriarch's Palace both untouched. In process of time the progressive settlement of the old foundations produced a rent between the old work and the new, and when operations were begun on the S. Alissio angle it was found to be completely detached from Meduna's restorations.

In dealing with the foundations Meduna's method was not to underpin the building and renew them, but to fortify them. On the outer side of the old foundations he drove larch piles about 11 ft. long, and between the pile-heads he forced blocks of stone to secure immobility; on the bed thus prepared he laid a platform, or *zatterone*, of oak beams, and on this again blocks of Veronese stone called *Secchiara*. To unite as far as possible the original foundations and their subsidiary fortifications, blocks of Euganean trachite were at certain intervals bonded into the old foundations to the depth of 1½ ft., an equal depth being bonded into the new work; while finally the new brick foundations, which reposed on the stone work, were mortised into the old for their entire length. Meduna's idea was to enclose the old foundations, as it were, in a vice, and thus to render them immobile. Where his system was applied it has fulfilled its purpose; but, as we have seen, his operations did not reach the S. Alissio corner. When the restoration of that structure was entrusted to Signor Luigi Marangoni, the architect now in charge, he resolved to continue Meduna's system as regards the foundations; as regards the external decoration we shall presently see how different a spirit inspires the present director of the work.

In proceeding with the restoration the first step taken was to shore up the entire angle. As there never was any intention to touch the clusters of columns which adorn the pavilion except where the movement had actually split them, the beautiful Byzantine capitals were each cased in in a box of wood for complete protection. Most minute and accurate drawings, as well as photographs, were then made of all the marble veneer which would have to be removed in order to restore the brick wall behind it. Not satisfied with these steps, a model was made showing each curve and sinuosity of the decoration in order that it might be religiously and accurately replaced on the conclusion of the work, and leave the spectator with the impression that nothing had been touched.

When this long and patient operation of recording the actual site and contour of the marbles had been carried out, the foundations of the bay known as the Pecorelle arch from the relief of the Twelve Apostles represented as a flock of sheep and the adjacent foundations of the S. Alissio pavilion were laid bare. Clustering close round the angle were discovered a large number of human bones, the remains of the pious who had sought sepulture as close to the face as might be. These bones were carefully replaced in a cement vault adjoining the foundations. The presence of sea-water made pumping constantly necessary, and on the whole it was obvious that the condition of the subsoil upon which the foundations of the angle rested were anything but satisfactory; and yet when these foundations came to be examined they proved to be surprisingly slight. The outer sustaining column, with the weight of 32 tons which it carries, rested on piles of white poplar, none of them 1½ ft. long, and only about 3 in. in diameter, just sticks to light a fire. Above these piles came a rude block of masonry, upon which rested the sustaining column. There is little wonder that, with lapse of time, its dial had ceased to mark the meridian. Meduna's system of fortification was applied to the foundations of the Pecorelle bay, and for the corner of S. Alissio larch piles 13 ft. long were driven into the subsoil; on these was laid a double platform of oak beams in cross direction, fastened together by pins of cornel or dogwood, the same system as that employed in the foundations of the Campanile. On this *zatterone* was laid the base of the column consisting of blocks of Istrian stone.

While this work was going on about the foundations, the marble veneer on the walls and arches was being carefully removed; each piece, numbered and bearing a mark to

indicate its original site, was wrapt in felt and stored until the time should come to replace it on the new brick-work. As the marbles were removed some of the decoration belonging to the third Church of St. Mark, built by the Doges Domenico Contarini (1063) and Domenico Selvo (1071), which was dedicated in 1094, were laid bare. They consist of brick niches and roundels most effectively and simply ornamented by a skilful arrangement of the bricks. These adornments have been measured, drawn, and photographed.

The condition of the walls revealed by the removal of the veneer was serious. The mortar had lost cohesion; the bricks, in many places, had crumbled; it was possible to pick them out by the hand. In the process of renewing the walls, in order to relieve the pressure on the capitals of the ornamental columns, blocks of Istrian stone were let into the main wall as brackets on which the superimposed columns could rest without bearing upon those beneath them. While engaged in restoring the wall on the Piazza side of the S. Alissio pavilion, it was found that the brick-work of the arch above the north-western portal was in a perilous state, and it is to be feared that the same may be true of the entire façade.

In the course of examining the brick-work a most interesting discovery was made. Behind the more modern structure which forms the arch of the present portal as we now see it, work of uncertain date, but later than 1200, the director came upon traces of the mosaic which must have adorned the façade of the church dedicated in 1094, that is, of the church begun by Contarini and finished by Selvo, when the plan of the building was altered from the form of a pure basilica which the Orseoli (978) had given it, to that of a Greek cross, as we know it now. It is impossible to say whether these mosaics of Doge Selvo covered the whole façade. They certainly did not extend round to the north side of the S. Alissio corner, for there, as we have seen, were discovered the brick ornamentation of Contarini's church. Nor is it possible, at present, to state the nature of the design on these mosaics; but as far as we know at present, it consists not of figures, but of scroll and foliage on a pale gold background.

It is interesting to note that the architects of that period paid little heed to the work of their forerunners; they applied their new wall directly on the older mosaic. Had the work been in the hands of the present director these mosaics would undoubtedly have been saved; as it is they threaten to fall away and perish as they are laid bare.

The work of restoration on the S. Alissio corner is approaching an end. The defective brick-work has been made good; the marbles have been restored to their places. Soon the scaffolding will be removed; and the work has been carried out with such loving care and determination to preserve every decorative detail of the S. Alissio pavilion that probably the crowd in the Piazza will say, "Why, they've had the scaffolding up all these years and they've done nothing." And that is just what Signor Marangoni and his band of trained artificers would like to hear.

Superintendent Architect wanted for Nigeria.

A superintendent architect is required by the Government of Nigeria to prepare plans and supervise the erection of buildings for the new Capital. The appointment will be on agreement for three years. The salary is £500, rising to £600 a year, with duty allowance of £100 per annum. Free furnished quarters are provided, and first-class passages allowed. Four months' leave in England on full salary will be granted after each tour of twelve months' service. Candidates must be members of the Royal Institute of British Architects, not under twenty-five nor over forty years of age. Applications should be sent immediately by letter giving full particulars of qualifications and experience to the Crown Agents for the Colonies, Whitehall Gardens, S.W.

Société Archéologique de France.

Mr. John Bilson [F.], F.S.A., in reply to the communication from Count Plunkett [Hon. A.] which appeared in the JOURNAL of 14th February (p. 238), writes:—"As I suggested the note of warning which was published in the JOURNAL of 31st January (p. 202), which Count Plunkett characterises as 'ungracious,' it may be well to say that this is no case of *jalousie de métier*, and that Count Plunkett is evidently inadequately informed as to the character of the society with which he has allowed himself to be associated. I have some knowledge of foreign archaeological societies, but I have never before heard of one that asks any payment for diplomas from its honorary members; still less can one imagine that, after a first application has failed, a second application for 45 francs would be made in the terms of a letter a copy of which I have handed to our Secretary. The Paris Press of this week gives some interesting information on the operations of one of the officials of the society in connection with traffic in decorations." Reference may also be made to the article headed "An Archaeologic Ramp" in *Truth* of the 4th March.

THE EXAMINATIONS.

The Final: Testimonies of Study.

The R.I.B.A. problems in design, submitted under Subject XIII., will be on view in the R.I.B.A. Galleries on March 20, 21, and 23, between the hours of 10 a.m. and 8 p.m. (Saturday, 6 p.m.)

MINUTES. IX.

SPECIAL GENERAL MEETING (ELECTION OF ROYAL GOLD MEDALLIST).

At a Special General Meeting summoned in accordance with the By-laws to elect the Royal Gold Medallist for the current year, and held on Monday, 9th March, 1914, at 8 p.m.—Present: Mr. George Hubbard, F.S.A., *Vice-President*, in the Chair; 41 Fellows (including 16 Members of the Council), and 25 Associates (including 3 members of the Council):

The Chairman moved, Mr. A. W. S. Cross, *Vice-President*, seconded, and the Meeting unanimously

RESOLVED, that subject to His Majesty's gracious sanction, the Royal Gold Medal for the promotion of Architecture be presented this year to Monsieur Jean Louis Pascal, Member of the Institute of France, Commander of the Legion of Honour, for his distinguished services as a teacher of architecture and for his executed works as an architect.

This concluded the business of the meeting.

SPECIAL GENERAL MEETING (SUSPENSION OF BY-LAW 28).

At a Special General Meeting summoned by the Council under By-law 65, and held on Monday, 9th March, 1914, at 8.5 p.m.—Present: Mr. George Hubbard, F.S.A., *Vice-President*, in the Chair; 41 Fellows (including 16 members of the Council), and 25 Associates (including 3 members of the Council):

The Chairman announced that at the urgent request of the

Council the President had consented to allow himself to be nominated for a third year of office, and that the Meeting was called to obtain the sanction of the General Body to the suspension of By-law 28 in order that he might be nominated President for the Session 1914-15.

The Chairman then moved, Mr. A. W. S. Cross, *Vice-President*, seconded, and the Meeting unanimously

RESOLVED, that under the provisions of By-laws 65, 66, and 67, subject to the approval of the Lords of His Majesty's Privy Council, By-law 28 be suspended from 31st March 1914 to the 30th June 1915.

Further, on the motion of the Chairman, it was resolved that the very cordial congratulations of the Institute be offered to Mr. Blomfield on his elevation to full rank as Royal Academician.

The Special Meeting then terminated.

BUSINESS GENERAL MEETING.

At a Business General Meeting held Monday, 9th March 1914, following the meetings above recorded, and similarly constituted, the Minutes of the Meeting held 23rd February 1914, having been published in the JOURNAL, were taken as read and signed as correct.

The Chairman announced that the Council had admitted the Queensland Institute of Architects to alliance with the Royal Institute.

The decease was announced of Peter R. Donald, *Licentiate*. Mr. A. W. S. Cross, *Vice-President*, acting for the Hon. Secretary, formally announced the receipt of a number of works presented to the Library (see SUPPLEMENT), and a cordial vote of thanks was passed to the donors.

The following candidates were elected by show of hands under By-law 10—viz.:

AS ASSOCIATES (55).

ADAMS: Laurence Kingston, M.A. [S. 1906], Warrington.
 AYLWIN: Guy Maxwell [S. 1911].
 BASKERVILLE: John Allbut [S. 1908], Manchester.
 BENNETT: Philip Dennis (*Grisell Gold Medallist* 1914) [S. 1911], Birmingham.
 BIRNSTINGL: Harry Joseph [S. 1912].
 BOX: Charles Wilfrid [S. 1909].
 BULL: Joseph William [S. 1912].
 COOK: John Oliver, jun. [S. 1904].
 CROMIE: Robert, P.A.S.I. [S. 1909].
 CRONE: Harold [S. 1911].
 CULLIFORD: Leonard Arthur, P.A.S.I. [S. 1909], Coventry.
 DAWSON: William Frederick [S. 1907], Leeds.
 DOD: Harold Alfred, M.A. [S. 1909], Liverpool.
 ENGLAND: Ernest Sugden (*Special*), Oldham.
 FISHER: Stanley Howe [S. 1911].
 FOGGITT: George Herbert (*Title Priceman* 1911) [S. 1907], Yeadon, near Leeds.
 FRISKIN: William Wallace (*Distinction in Thesis, Final Exam.*) [S. 1913].
 GAYMER: Bernard Preston [S. 1912], North Walsham.
 GIBBS: Harry Beckett Swift (*Distinction in Thesis, Final Exam.*) [S. 1911], Sheffield.
 GODFREY: Henry Victor [S. 1908].
 GRICE: William Stanley [S. 1911].
 GUTTERIDGE: Richard Howard [S. 1912].
 HARTMANN: Carl Herbert [S. 1908].
 HATCHARD-SMITH: William Hornby (*Special*).
 HAWLEY: Charles Dearman (*Distinction in Thesis, Final Exam.*) [S. 1908].
 HEAL: Albert Victor [S. 1910].
 HITCH: John Oliver Brook [S. 1913].
 HOLLAND: Harry Dawber [S. 1909], Wigan.
 HUGHES: Vernon Hugh [S. 1911].
 JELLEY: Frederick Richard [S. 1909].
 JONES: Herbert [S. 1909], Manchester.
 JONES: Walter Sydney [S. 1910].
 KIMPTON: Charles Stanley (*Special*).
 KNAPP-FISHER: Arthur Bedford [S. 1909].

LEIGHTON: Henry Birkett (*Distinction in Thesis, Final Exam.*) [S. 1912], Sheffield.

LOWCOCK: Arnold [S. 1910], Rotherham.

LOWES: Albert Edward [S. 1910], Newcastle-on-Tyne.

MACKELLAR: Robert Norman Houghton [S. 1912], Glasgow.

MANN: Henry William [*Special*].

MATTHEWS: Harold Ewart [S. 1906], Derby.

NEWHAM: Theodore Nelson [S. 1909].

PATERSON: William (*Distinction in Thesis, Final Exam.*) [S. 1913], Edinburgh.

POWELL: Herbert Cecil [S. 1907] Stockport.

PRITCHARD: William, P.A.S.I. [S. 1905], Liverpool.

ROGERS: Cecil Walter [S. 1912].

RUSSELL: Robert Tor [S. 1909].

RUTTER: William Arthur [S. 1909].

SALISBURY: Stanley [S. 1901].

STANTON: Stephen James Bridges [*Special*].

TEBBS: Charles Edward [S. 1913], Newport, Mon.

THOMPSON: William Harding [S. 1909].

WALTER: Robert Albert [S. 1911].

WARNES: Claude Cornelius Tom [*Special*], Edinburgh.

WOODWARD: Frank [*Special*].

YETTS: Laurence Muskett, B.A. Cantab. [S. 1911].

AS HON. ASSOCIATE.

BULLOUGH: Edward, M.A. Cantab., Fellow of Gonville and Caius College, Cambridge.

The Secretary announced that Messrs. Richard Wood and William Edwin Johnson had been reinstated by the Council as Associates.

The Meeting then passed to the consideration of the draft Revised Schedule of Professional Charges (adjourned from the Meeting of 12th January), commencing with Clause 4.

* **CLAUSE 4.**—*If the project be abandoned, or if from any other cause the services of the Architect cease or are dispensed with before a contract is entered into or order given, the remuneration is as follows:—*

For preliminary studies, and approximate estimate by cubic measurement, one-fifth of the appropriate percentage calculated on the estimated cost.

For preliminary studies, approximate estimate by cubic measurement and general drawings and specifications sufficient to enable quantities to be prepared or a tender obtained, three-fifths of the appropriate percentage calculated on the estimated cost.

An amendment by Mr. Edward Greenop [F.], seconded by Mr. H. P. Burke Downing [F.], to delete the words "if from any other cause" was agreed to.

An amendment by Mr. Edward Greenop [F.], seconded by Mr. W. Henry White [F.], to insert the words "or instructions," so as to read "before a contract is entered into or order or instructions given," was negatived, and the wording agreed to as printed in the draft.

After discussion of various amendments, the second and third paragraphs of the clause were agreed to as follows:—

"For taking client's instructions, preparing sketch design, and making approximate estimate of cost by cubic measurement, a fee equal to one-fifth of the fee set out in Clause 1.

"For taking client's instructions, preparing sketch design, making approximate estimate of cost by cubic measurement, and preparing drawings and specifications sufficient to enable quantities to be prepared or a tender obtained, three-fifths of the fee set out in Clause 1."

* **CLAUSE 5.**—*The above remuneration shall cover the above specific services or their equivalent; and on a contract being entered into or order given for the works the Architect shall be paid an instalment of three-fifths of the appropriate percentage calculated on the total price of the contract or order, and no part of such payment shall be reclaimable from the Architect on*

account of the subsequent abandonment of the works or for any other reason. The remainder of such remuneration shall be payable by instalments from time to time as the work proceeds on the issue of certificates to the Contractor.

Various amendments proposed by Mr. A. W. S. Cross [F.], Mr. S. D. Topley [A.], and Mr. Edward Greenop [F.] were agreed to, and the clause was passed as follows:—On a contract being entered into or order given for the works the Architect shall be paid an instalment of three-fifths of the fee calculated on the total amount of the contract or order, and no part of such payment shall be reclaimable from the Architect on account of the subsequent abandonment of the works. The remainder of such remuneration shall be payable by instalments from time to time as the work proceeds on the issue of certificates to the Contractor.

* **CLAUSE 6.**—*In addition to the percentage on the total cost of executed works the Architect is to be paid three-fifths of the appropriate percentage calculated on the estimated cost in respect of all works included in the tender or order, but not executed.*

The substitution of the word "fee" for "percentage" and "appropriate percentage" was agreed to, and with these amendments the clause was carried.

* **CLAUSE 7.**—*In all cases where the remuneration is by way of percentage, the amount of the percentage shall if necessary be apportioned, and the total or estimated cost (as the case may be) shall be valued as though the works are executed with new materials throughout.*

After considerable discussion, the wording of the clause was recast by Mr. Paul Waterhouse [F.], and agreed to as follows:—"In all cases where work is executed wholly or in part with old materials, or where material or labour is provided by the client, the fee shall be calculated as if the works were executed with fully paid material and labour throughout."

* **CLAUSE 8.**—*The above percentages do not cover the following services, for which, and for any other services not covered by any payment herein provided for, the charges are to be based on the skill and work involved, but are in no case to be less than the Time Charges mentioned in Clause 18:—*

Advising as to the selection and suitability of site; the preparation of further sketch designs necessitated by a material alteration in, or addition to, the client's instructions; negotiations relating to the site or building; surveying the site or building and taking levels; making surveys or plans of buildings to be altered; making arrangements in respect of party walls and rights of light and other easements, reservations, or restrictions; making extra drawings for client's or contractor's use; making drawings for, and negotiations with, ground landlords, adjoining owners, or local or other authorities; the measurement and valuation of deviations, alterations, additions and omissions; services in connection with the laying out of grounds; services consequent on the failure of contractors, by death or otherwise, to carry out the works; services in connection with fire, flood, or tempest during execution of works, or services in connection with litigation or arbitration.

A motion by Mr. Herbert Shepherd [A.] that the clauses be read before being put to the vote was lost, and Clause 8, as printed in the draft, was agreed to without alteration.

* **CLAUSE 9.**—*For surveying and making a plan of a town, village, street, estate, or grounds, and for designing and preparing plans for the development of an estate, the charges are in accordance with Clause 8.*

The clause was agreed to without alteration.

At this point, on the motion of a member, a count was made of those present, and the numbers being found short of the necessary quorum, the Chairman declared the proceedings at an end.

The meeting closed at 10 p.m.

* The clauses in italics are as printed in the original draft.



The Forum, Rome.

BORROWING IN ARCHITECTURE.

By LISLE MARCH PHILLIPPS.

Read before the Royal Institute of British Architects, Monday, 23rd March 1914.

YOU will agree with me, perhaps, that the question of borrowing in architecture is of particular importance at the present time. Borrowing is carried on nowadays on so extensive a scale that it may be said almost to constitute itself the art of Architecture. Our knowledge is much wider in these days than ever before, the whole world and its history are so much more open to our scrutiny, that to ransack the ages and spoil the climes is no longer a metaphor. We do it.

And, together with this wealth of material provided for us, there has grown up a corresponding catholicity of taste which encourages us to welcome all experiments, if not with enthusiasm, at any rate with equanimity. Nothing nowadays seems to us foreign or far-fetched. We greet with the same gentle resignation an hotel like a French château, a palace designed for the Emperor Augustus, a Tudor Town Hall, a mediæval church, or a Byzantine cathedral. Are such unrivalled opportunities for borrowing all clear gain, do you suppose, or are there any drawbacks or limitations implied in the practice?

What, to begin with, does the word "borrow," applied to architecture, mean? I ask because in a recent newspaper controversy in which I played a humble part I found it often used as if it meant the same thing as assimilate. Why should we not borrow? I was asked. All the best builders had always borrowed. It was even a sign of vitality in art to borrow, so that the more we borrowed the better.

But, as a matter of fact, the vital styles have never borrowed. They have assimilated—that is to say, made like to themselves foreign bodies, which have lost their own identity more or less in the process of absorption and gone to nourish and strengthen the assimilating styles. But that is a very different matter. The fellow-word to "assimilate" is "digest." You could speak of a hungry man assimilating or digesting a beefsteak, but certainly not of his borrowing it.

Here lies the difference. The thing borrowed is not assimilated at all. It is not made like

anything else, nor does it lose its own identity, nor does it even become the property of the borrower. Its very name asserts its foreign origin, together with the expectation that it will one day be returned and that the use of it is only temporary.

You will see how this applies to architecture. Architectural features which have been assimilated have been so much food to the assimilating style. Architectural features which have been borrowed have remained mere foreign accretions stuck on, superficially adhering; and so far from nourishing anything, they have always tended to cripple and weaken the vitality of the style they are affixed to, much as ivy saps the life of the tree to which it clings. Finally, if they come in sufficient numbers, they kill the existing style outright, and then they proceed to form a style of their own, composed altogether of borrowed features, in which the principle of life is extinct.

So, when we are invited to borrow on the plea that all ages have borrowed, it seems necessary to distinguish. Creative epochs, in which art and life are in touch with each other, assimilate but do not borrow; non-creative epochs, in which art has lost touch of life, borrow but do not assimilate. It is with the process of borrowing, not with the process of assimilating, that we are concerned to-night, and particularly we want to discover what have been the consequences of borrowing on those styles which entered upon the practice.

If you will glance at the history of architecture, as we know and use it—from Greek days onward, that is to say—you will perceive that downright flagrant borrowing has twice been resorted to as a source of ideas and as a substitute for creative effort. The first time was when Rome borrowed from Greece; the second time was when Europe borrowed the resulting mixture from Rome. The first of these episodes I shall touch on briefly. All I want to do is to point out that at the time Rome borrowed from Greece she was, as a matter of fact, developing a style of her own, effective, original, and of great promise, and that the borrowing process certainly acted as a check upon this.

No one can study the Roman national character, together with the architectural features in which that character instinctively expressed itself, without perceiving that the true Roman idiom was the arch. Naturally when left to herself it was to this she inclined. This aqueduct (Fig. 1) is pure Roman. Does it not contain the promise of great developments? It is much more than rude work. Its splendid masonry—for masonry is the basis of all architecture—and the powerful articulation of the arches are full of promise. You would say that here was a people whose hold upon the arch was of a kind that would expand into a great style of arched architecture. To my mind the most characteristic and noblest structural works of the Romans are of this kind—are, that is to say, their aqueducts, bridges, drains, and roads. In these they were themselves, and the qualities which are discernible in these—a stern simplicity, a sense of practical purpose ennobled by a correspondingly direct treatment—may often be dimly apprehended behind the Greek additions to their more ornate buildings.

This was where the Roman promise lay, and that promise was identified with the arch. I will ask you to remember this aqueduct as we go on. A great critic, speaking of Byron's poetry, praised its "splendid and imperishable excellence of sincerity and strength." It is this splendid and imperishable excellence of sincerity and strength which turns a piece of unadorned and almost rude building like this into noble architecture.

We will see what became of those qualities. This triumphal arch (Fig. 2) is a characteristic bit of fully developed Roman architecture. The arch-principle—the real Roman—is hidden away in the middle of it, half suffocated, thwarted, powerless to develop; while the surface and outside are occupied with Greek features, true borrowings, you will observe, not assimilated and never to be assimilated, foreign in their very nature and merely serving to choke the vigour and life out of the structure they adhere to.

Let us look into this a little farther. There are high authorities who affirm that the Greek element in Roman work is to be accepted as mere decoration, not impeding the free articulation of Roman ideas. Sir Thomas Jackson takes that view in his book on Byzantine and Romanesque Architecture, but, with all respect, I find it difficult to follow him. After admitting that "ornament is indefensible when

it falsifies or conceals" the construction, Sir Thomas adds that "to the latter charge, at all events, the Roman architect need not plead guilty; his wall decoration by columns and entablature deceives nobody."

I cannot help thinking that the author is here inclined to endue people too readily with his own trained and practised power of observation. You will observe that in this, as in most Roman work, it is the ornament, the shaft and lintel, which does all the articulating, the arches being stuffed away into the gaps within them. [Fig. 3.] Who not familiar with Roman tricks would divine, save after examination, that the most salient features of the whole structure, the largest in scale, and those which outline and define its composition, are irrelevant to its construction, and, in short, are mere structural shams? One has been taught that decoration must be subordinate to the structural features, but

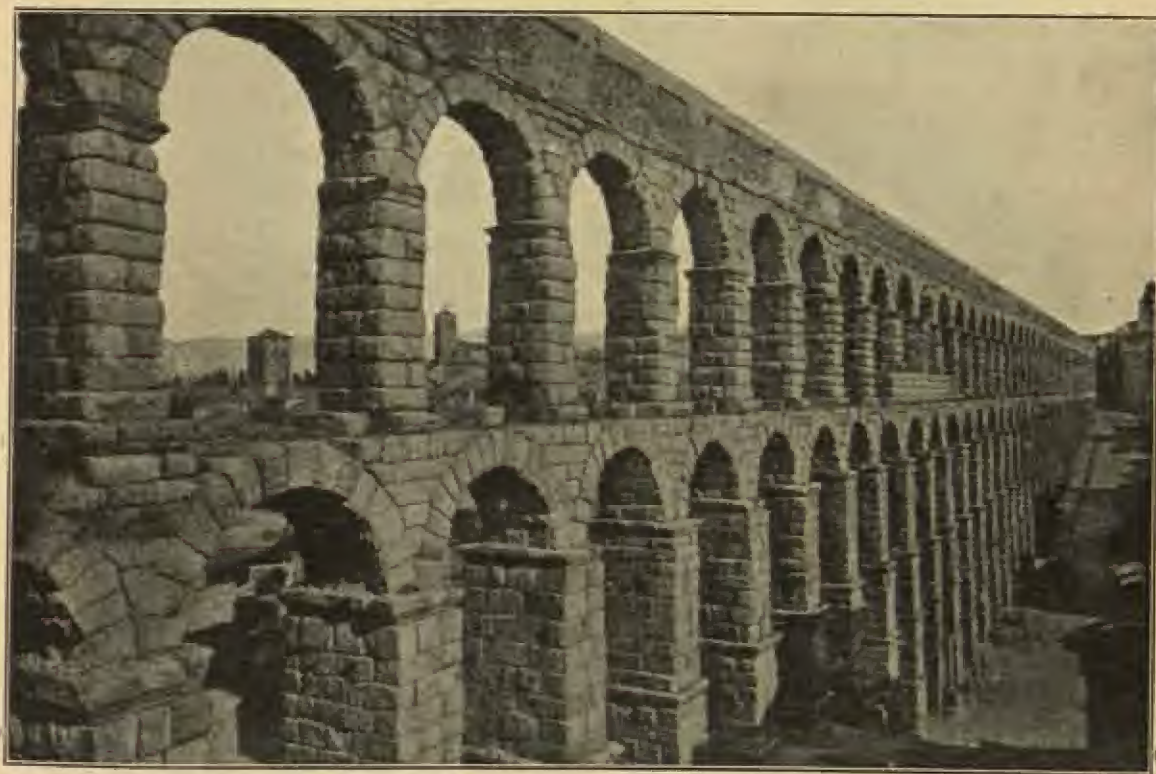


Fig. 1. THE AQUEDUCT AT SEGOVIA.

From *The Architecture of Greece and Rome*, by W. J. Anderson and R. Phené Spiers (Batsford, 1907).

here it is the structural features which are subordinate to the decoration. Over and above that, however, what remains in any case sure and certain is that a scheme of decoration on so vast a scale, contrary in its own character to the constructive principle of the architecture, must tend to impede and thwart the free development of that architecture.

Let me dwell on this one moment, though to most of you it is familiar ground. Typical Roman buildings are made up of a core of masonry which is Roman and a veneer of marble which is Greek. The Roman core is arched, the Greek veneer trabeated, and it is these two principles which are irreconcilable and mutually destructive. They are irreconcilable, mind, not only outwardly and apparently, but inwardly, in what they are doing and in the force they are exerting. They represent respectively the active and passive principles in construction. The arch is active because the pressure upon it is not communicated direct to the ground, but is translated into lateral thrust, as it is called. I am explaining this for the sake of those here present who do not belong to the building profession and may never

have thought of the point. Press down on the rim of a child's hoop and the hoop will expand. Your vertical pressure is translated into a lateral or horizontal pressure. But a horizontal pressure, a



Fig 2. ARCH OF TITUS.

From *Baudenkmäler des Alten Rom*, by Heinrich Strack (Ernst Wasmuth, Berlin, 1900).

pressure across the line of gravity, cannot be directly opposed by any natural force. It remains active. Thus a great arched building, a Santa Sophia or a mediæval cathedral, is a composition of activities. It

is all made up of the invisible pressures and thrusts and counter-thrusts of the arched vaults of nave, aisle, and choir battling together, and for all it looks so rigid is inhabited by forces which would burst



Fig. 3. THE COLOSSEUM, ROME.

From *Baudenkmäler des Alten Rom*, by Heinrich Strack (Ernst Wasmuth, Berlin, 1890).

it asunder like a lyddite shell were it not for the fact that they are matched to hold each other in check. That is the idea of arched construction. It implies the generation and subsequent manipulation of the activities latent in the arch principle. Trabeated construction, on the other hand, is passive. Down-

ward pressure is met by vertical support. The weight on the columns sleeps. No activity is generated.

This is why these two principles are incompatible. They do their work in different ways. Mix them and by no process of the intellect can you arrive at any clear idea as to which principle is doing what work. This is what is fundamental: this falsehood in conception, in idea. All architecture is reason and thought. You do not see the weight of the impending mass, nor the strength of the supporting column, nor the lateral thrust of the vault or arch, but you have an idea that these forces are there and of their direction and extent, and you embody your idea and give your idea shape in the structural forms we see. It follows that the more clear and true your idea is of the form's function the more clear and true will the form itself be. And so with the whole building; the clearness of your intellectual grasp of the play of forces which compose the structure will be measured in the rightness of its design and proportions. I do not say this is *all* that is necessary, but it is the first thing that is necessary. It is the indispensable foundation on which any genuine architectural merit must depend.

So the hope of development of any structural principle lies in keeping that principle pure, which is exactly what the mixture of Roman and Greek ideas renders impossible. These Greek borrowings, which adhere to Roman arched work, and here in the Parthenon encase it with a rigid straight-waistcoat of rectangles, are irreconcilable in character with the Roman structural idiom. What those forms were capable of in Greek hands is not to the purpose. In Roman art they represent the corruption of all that was healthy and genuine in it. "To some," says Sir Thomas Jackson of Roman architecture, "its utilitarian element may appear to degrade it to a lower level than that of Greece." Personally the utilitarian element is about the only thing in Roman architecture I admire, and I admire it because it is the only thing that is really Roman. Behind the Greek borrowings, behind the artificial powder and rouge which the fashion of the day applauded, one is, as I have said, conscious of a something in the background, a sense of masculine purpose and resolve, hidden away and made ridiculous: that excellent sincerity and strength we noted to begin with—which, allowed free play, might have produced in its own line as noble an architecture as any—brought to this, the life drained out of it, the power of development and growth curbed in it, and all demonstrably and obviously by the introduction and use of borrowed forms and a borrowed style of art.

Let us glance forward one moment before leaving this part of the subject. What happened to Roman architecture? The Romans never spoke out, never dared to be themselves, in architecture. And for its untruth to itself their architecture paid the penalty in the growth of a style of quite evidently artificial composition, a style which ignores the creative instinct altogether. I remember at Sbeitla, in North Africa, where the remains of a Roman town overlook from the slopes of the Atlas the vast distances of the Sahara, being extraordinarily impressed by the mechanical and Juggernaut quality in this architecture. Here, in this strange, remote land of palm and desert and fierce sun—here were the same old temples and triumphal arches, the same old capitals and entablatures and egg-and-dart mouldings and acanthus leaves all cut to the same pattern which had become a kind of architectural routine all over the Empire. And on the edge of the Syrian desert it is the same, and all over Europe. Wherever the Eagles went they built their eyries to the same pattern. The resultant uniformity gives one, no doubt, a great idea of Imperial discipline, but it gives one, too, an overmastering sense of the cold indifference with which the dwellers in all these countries must have watched the growing up of stereotyped structures in which there was absolutely nothing that they themselves could take an interest in or claim as their own.

These, then, are the two points which I believe are most noticeable about Roman architecture. First, that the system of borrowing which Rome adopted tended to stifle the exercise of the national creative instinct; and secondly, that as a consequence of this, that system tended to develop itself into a style, imposing enough in scale and magnificence, but essentially formal and mechanical; a style cut off from life, not recognising the life around it nor recognised by that life.

This is the first great example of borrowing which we have to notice. And now I come to the second instance—that is, the Renaissance. I shall deal with it only as it affected England, and I shall ask you to let me go back a little and examine the pre-existing state of things; because it is essential, if we would realise the influence and effect of the borrowing process, to appreciate first the nature of the existing style in England and its relation to the life of this country. We can do in this case what we could not so thoroughly do in the Roman case—we can analyse the character and estimate the value of the national style upon which the importations acted with certainty and precision.

But in order to do this it is necessary to bear in mind the great silent revolution in thought and in ideals which was taking place in the fifteenth and sixteenth centuries in England, and which was itself effecting a like revolution in the national style of building. Illustration is always the quickest explanation, and a glance at a pure Gothic structure will save many words. [Fig. 4.]

Everyone has felt the character expressed in this kind of architecture. The spiritual fervour, the rapture of adoration in which the style is steeped still appeal forcibly to all of like temperament. It is still the religious style *par excellence*; and that not because of its past associations, but because naturally and instinctively people recognise in the upward rushing lines and ribs of stone a visible incarnation of the dominant spiritual impulse. As it stands, the architecture is a perfect expression of the life of its age. All the characteristic, strongest marked impulses and institutions of the age find in it their embodiment. The spirit of chivalry, the spirit of asceticism and entranced contemplation, the spirit which still lingers in the lonely deserted cells of monks and anchorites, the spirit which strewn the roads to Palestine with the dead of both sexes, this spirit still utters itself in the incredibly tall vaults and fearful vigour of the ascending lines, no less than in the narrow and cramped proportions of early Gothic architecture. Nothing can be more vivid than that expression of life; but turn a century or two and you will find both the life and the expression of it changing. You will find springing up all over England during the fifteenth and sixteenth centuries a shrewd and matter-of-fact temper, very practical and with a highly developed sense for material considerations. Authority and importance, you will find, are in process of shifting from knight and monk to hard-headed business men, yeomen and tradesmen. "The whole interest of the fifteenth century," says that very keen-sighted historian, Mrs. J. R. Green, "lies in the life of very common folk—of artisans and tradesmen in the towns, and, in country parts, of the farmers." This century, she adds, created "a whole class of men throughout the country trained in practical affairs, doing an admirable work of local government, active, enterprising, resolute, public-spirited, disciplined in the best of all schools for political services. If there was no great writer, the new world of the middle class was patiently teaching itself, founding its own schools, learning its primary rules of etiquette and its simple maxims of morals, reading its manuals of agriculture or law or history, practising its Latin rhymes, and building up in its own fashion from new beginnings a learning which the aristocratic class had been too proud, too indifferent, or too remote to hand on to it." The same authority goes on to point out how now for the first time "the burghers began to perform in the national economy the work which in earlier centuries had been performed by the great monastic societies." "The extension of trade and manufacture had fallen into their hands; they were busied in the gathering together and storing up of the national wealth."

Here you have a glimpse of the change that was going on, the change in mental outlook from the spiritual to the practical. This, you will observe, is a national affair. What we are looking at now is the *English Renaissance*, the Renaissance before, for us, it became mixed up with any Italian ideas or classic expedients whatever, when it represented no more than that turning from the things of heaven to the things of earth which was common to it in all nations, and, in all nations, was the first cause and origin of the movement.

I should like to emphasise this point: granting that the Renaissance was, as it is called, an *intellectual* awakening, nevertheless it is possible in considering it to overdo the part played by intellect. There is something, there is an influence at work in the heart of the movement more fundamental than

intellect. I do not think that the event we have been looking at—the awakening, I mean, to a consciousness of the practical importance of material things—can very well be called an awakening of the intellect; nor do I think that the men who carried it out, the yeomen, tradesmen, merchants, farmers, squires, and artisans of the fifteenth century could with any justice be called intellectual. This indeed was the difference between the movement in England and the movement in Italy. In maturer Italy, Italy with a long past and ancient civilisation behind it, Italy in which the barbaric element represented rather a kind of top-dressing than the body of the soil itself—in this Italy intellect responded to the mundane appeal with the utmost promptitude, the consequence being that the Italian Renaissance put on, with a fascinating alacrity, all the manifold beauties and graces which belong to an intellectual interpretation of the universe. In England we missed that. The mundane movement in England throughout the fifteenth century, and as long as it remained a national affair, was in the hands not of scholars and philosophers and poets and artists, but of merchants and shopkeepers and yeomen-farmers and artisans. It may, however, be said of these that their grasp of the actual, though lacking in discrimination and sense of values, was even more vigorous and tenacious than that of their rivals, and afforded promise of correspondingly important results when the time of intellectual maturity should have arrived.

That, so far as I can indicate it in a few words, seems to be the nature of the revolution which was now taking place. Now let me ask you, looking still at life and not yet at architecture, what will be the needs in building of the new society? The old spiritual fervour has gone out of life; therefore the passionate verticality which in architecture embodied that sentiment must go too. What will take its place? Figure to yourself the life of that age, its human interests, its sociability, its civic pride and well-being, its growing regard for comfort and convenience; of course, what is wanted in the new architecture to suit the new mood is breadth, amplitude, spaciousness. This was what the mental revolution we have been describing meant to art. This was the demand it made.

And you know how it was met. I will mention but two of the main constructive features of the new style: the arch and the vault. The tall pointed arch was bent over at the shoulder to form the horizontal Tudor arch, while the steep vaults were flattened and their ribs spread out in concentric circles, like ripples on sand, to form the vaulting which we know as fan-tracery.

These were the methods, bold, simple, reasonable, which our English builders proposed for meeting the new situation; and it is remarkable that the obstinacy of the national character and the pertinacity with which it stuck to its own methods, did enable it to do here what was done nowhere else in Europe—namely, to evolve a Northern style of Gothic on horizontal lines—that is, on Renaissance lines. Tudor is Northern Renaissance. It is, that is to say, the mundane spirit expressing itself in terms of Northern art, and it constitutes, as it seems to me, by far the most definite and important contribution that England has ever made to the history of architecture.

We have now reached the point where the second great borrowing epoch begins. You will see that there is one difference between it and the same point in Roman history which is worth noting. I suggested that the Roman borrowings concealed, and at the same time hindered, a genuine Roman style. That is, I think, true; but how far such a style was organic and how far only rudimentary is matter of speculation. In the case of England it is not matter of speculation. At the time our borrowing began there was, as we know for a fact, a native style in full blast; a style which was answering the new needs of life adequately and vigorously; a style which justifies its claim to the title of style by the consistency and coherence of its constructive expedients. There was no question of English architecture being exhausted or incompetent. On the contrary, it was full of vitality and invention. It was setting itself to solve the problems of the age with so much success that actually the things it did in that manner remain unapproached to this day. I think, if we took a referendum on it, that would be the verdict. The ideal of architecture has not changed. It is still for breadth and spaciousness. But nothing that has been done on those lines since the seventeenth century,

with the help of all our science and archæology and research and unlimited wealth, can compare, in the public and national estimation, to the results which the Tudor style in its few years of life



Fig. 4. CATHEDRAL OF REIMS.

had already achieved. The great Tudor mansions and manor houses are for beauty and comfort at this very hour unrivalled. The Tudor civic and municipal buildings, Tudor colleges (witness all Oxford), Tudor fan-vaulted churches are each in their own sphere the best that we have done. Such was the

performance and such the promise of the style which at that time held the field in England. Yet this indigenous style, in spite of its apparent vigour, grew up under the shadow of an imminent danger. Almost from the first it had to stand a siege. There can be no doubt that for once in a way, in the development of this new style of hers, England's proverbial inaccessibility to ideas stood her in good stead. All the time she was working out her own solution she was keeping another solution at bay. There lay her advantage over France. France would certainly have worked out a spacious style of her own (there are plenty of signs that she was on the way to it), more or less on the lines of Tudor, had she been able to stave off the Italian solution. But she could not do it. The general desire for breadth and search for breadth in architecture were bringing all Europe in sight of the classic mode of construction. Italy, naturally enough, was the first to seize upon it. But it met, or seemed to meet, the need of the age so admirably that, identified as it was with Italian culture and the new ideas, it was swiftly adopted by other nations. England alone—impervious old England, who has never had much use for ideas—stuck doggedly to her task of manufacturing her own breadth in her own way. She effected something, as we have seen. She really did construct the only Northern spacious style that ever has been constructed. But the invader was too strong for her. Little by little, filtering in here and there, fixing first on decorative design on the plea of merely enriching the native style, the Italian ideas crept in. But the real fight was not over matters of decoration, but of construction. The real struggle was between those two characteristic structural features, both horizontal in their nature and in each of which is contained the germ of a style, the Tudor arch and the Latin architrave.

I am not going to follow the details of the combat. One can narrow down the view to the difference between Elizabethan and Jacobean. Elizabethan is still English, because it retains the English work. Jacobean is Latin, because it uses the Latin architrave. It was with the final victory of the latter that the great borrowing epoch which still continues set in.

Here, then, we stand at what journalists call the parting of the ways: with a self-created national style behind us and a borrowed one in front. Certainly in some particulars the situation is very like what it was in the Roman era. An arched style in both cases is meeting the dangerous attack of that feature in which more than any the clean-cut intellectualism of the Greek genius has embodied itself. The result of the struggle was in both cases the same, and in some respects I think the after consequences have not been dissimilar.

Compare the two instances: neither of them, you will see, even attempts to assimilate. Both are examples of borrowing. The Roman style was not taking from the Greeks anything that it needed, that was like to itself, that harmonised with its own character. It was not the natural instinct and appetite of the Roman style which led it to adopt these expedients. The invading features were in marked dissonance with existing methods, and what brought them into use was no sense of artistic fitness but a vague respect for Greek culture and Greek ideas. It was in the Greek world, remember, not in the Roman, that there reigned that perfect mental lucidity which is the thing of great price in the classic epoch. In the Doric temple the Greeks had evolved the purest image of intellectual power that the eyes of man have ever looked upon, and though others might not quite understand it, yet its influence was felt. People were impressed by the idea that the Greeks knew what they were about, that they had reasons for doing what they did. This, as you know, is the rarest possible thing in art, to have *reasons* for doing anything; and the perception that the Greeks had reasons impressed everyone very much. So the Greek prestige spread, and it was this prestige which brought about the introduction of Greek structural features. They were held to be the mark of a superior culture, and it was a sign of refinement and an enlightened education to indulge them. The patrician class especially exhibited what they were pleased to think of as a fastidious taste in the appreciation of Greek ideas, and Greek architects were soon employed in designing porticos and colonnades for their villas.

Word for word that applies to the coming of classic into England. The native English style had no use for the stuff, was totally incompatible in character with it, never did even attempt to assimilate

it. But it came backed by the prestige of Italian ideas and Italian culture, with the whole weight of the Renaissance behind it. It became in consequence the mode in English aristocratic circles, just as Greek had in Roman, and over came the Italian architects to build for English kings and nobles, just as the Greek architects had come over to build for Roman emperors and patricians.

And so, too, in both cases this arbitrary transplanting of foreign forms into the midst of a national style had precisely the same result. It ended not in nourishing and invigorating, but in checking and finally extinguishing the national creative impulse. That really is a self-evident fact, at least in the case of England. It is admitted, it is indeed patent, that the style we were just now glancing at, with all its vigorous expedients resulting in the thoroughly English, thoroughly coherent, Tudor architecture, was destroyed and put an end to by the classic invasion.

It is more difficult to gauge the ultimate consequences and after-effects of such an invasion. I pointed out to begin with that foreign features transplanted bodily into another country were apt to kill the indigenous style; after which, as I said, thinking chiefly of the case of Rome, they come together to form a kind of dead style of their own, composed of transplanted forms fitted together without any interior impulse of growth and vitality. I think there is a good deal in that so far as Rome is concerned. No doubt her domestic architecture must have offered a field for variety, and no doubt national character will persist in seeking opportunities for self-expression; but I am sure no one can study Roman architecture—chiefly certainly in its great buildings, its temples and amphitheatres and palaces, but also to some extent in its villas and fashionable towns, like Pompeii—without realising how very much a matter of automatic routine the art had become. It is not only that the same designs are everlastingly repeated and the same structural features and the same ornament and decoration perpetually reproduced; but the actual work itself, the cutting of the mouldings and sculpture of foliage, hair, and drapery, is so lifeless and automatic as most indubitably to suggest a style which has been sapped of all inward growth and vitality.

It would be a long and difficult task to trace the parallel influence through English art. I shall not attempt that task, but will leave it to your consideration. But in turning from it, let me point out to those who would undertake it the necessity of distinguishing between broad, general influences and more or less partial and superficial exceptions. It would be easy to point to examples of infinite individual variety, and perhaps even to find some traces of the expression of national character in later English architecture. But is there not another influence, persistent and ineradicable, which always makes, like a current, in the direction just now indicated, the direction taken by Roman art towards a mechanical composition made up not of growing but of dead forms? It is natural, mind you, that large importations of foreign forms should end in this, and are there not signs round us that our large importations of classic forms are drawing us in that direction; that that is their bias? I recalled just now the feeling I had at Sbeitla and elsewhere of the incompatibility of Roman work with any kind of human regard or interest; of its evident total separation from human life. Well, sometimes, walking down Parliament Street among the Government offices, or looking at the pilasters and pediments of some great modern Corinthian structure, I seem to feel over again the same emotion, my mind seems to be invaded again by just that consciousness of the unutterable deadness of the thing looked at, as I felt when I watched the ruins of the Roman temples on the edge of the Sahara.

Is there not this tendency in modern architecture; this tendency to make, as it were, an artificial style out of the alien forms we have amassed? One thing you must often have noticed, I mean the inevitable structural truth and sincerity of the living styles of architecture, how such styles always used constructive features as constructive features, in their right places and for their right purposes as if they had grown there, just as living plants or animals develop their limbs and members, life itself being the guarantee of right development. It is otherwise with borrowed forms, which are often used in a quite arbitrary and make-believe manner, not structurally at all, but as mere surface

appearances: after the manner of, in short, the Roman use of Greek forms, not to do the work, but just used to look at as a sham and a show.

I wonder, if we went up and down London, if we should find anything of that sort going on, any of our classic borrowings used not structurally at all but merely as dead things, stuck on to look at? Only the other day I came upon a report of a speech by Mr. Maule, late headmaster of the London School of Architecture, delivered to the Birmingham Architectural Association, and my eye lit on this sentence: "Was there any reason in the senseless reproduction of meaningless features, which had long since lost any structural reality, and were mere atrophied remains of some ancient structural form?" You can judge better than I can how much truth there is in that, and whether the Corinthian gewgaws which are shoved up on the fronts of buildings are realities or shams. All I want to do is to remind you that a tendency to this kind of use, if it should happen to exist, is a natural characteristic of that dead architecture which people sometimes construct out of remnants borrowed from foreign sources.

No more terrible charge than that can be brought against any architecture. I pointed out, in dealing with the false construction of the Romans, that the only thing which in the long run keeps architecture straight is constructive truth. Where and of what kind are the stresses and strains and pressures of the structure? Let them speak. They are the architecture; and the clearer they speak the more articulate will the architecture become. When our rude forefathers stuck on end their clumsy monoliths, on down or moorland, with rough blocks balanced across them, they were already groping after the column and the lintel. And, as reason grew, as the fog of ignorance lifted and the mental image of the forces at work shone clearer in men's minds, so out of the rugged Stonehenge boulders the forms of column and architrave slowly emerged. It was this idea of truth to duty which has presided over the evolution of structural features and which still maintains and preserves them. The thought is common that it is just this performance of allotted duty in Nature's scheme which preserves in all things their symmetry, beauty, and life. "Thou dost preserve," you remember Wordsworth says in his Ode to Duty—

Thou dost preserve the stars from wrong;
And the most ancient Heavens, through Thee, are fresh and strong.

And so down to the tiniest objects the law holds; and it applies, too, working through man's reason, to the forms which he creates. Forms which embody their functions have an eternal sanction. Forms which outrage function, or which pretend to be fulfilling a function which they are not fulfilling, have the lie in their soul.

Yet though this law is so fundamental, there is none more readily lost sight of in an epoch of borrowed forms. In both the great borrowing periods we have been looking at the case has been the same. A core of Roman concrete in the one case was plastered over with alien features, not used constructively, features which were a sham, and which, because they were a sham, could come to nothing themselves nor let the interior masonry come to anything. We, too, have a wonderful concrete, and who can doubt but that, like the Roman, it is capable of development? If it is good building material it is good architectural material. Indeed, it is evident at a glance that both structurally and in the chances it offers of surface decoration it has great opportunities. What hinders it? Why, the misapplied borrowed features with which it is encumbered—features which, because they are shams, pretending to structural uses which they do not really perform, can come to nothing themselves nor suffer the real building material to come to anything. We do not dare to speak out in architecture, to take simply our material and our necessities and fit the one to the other. We are afraid of being ourselves, and we are paying the penalty that Rome paid long ago, in the rise of an official and stereotyped style cut off from human interest and from human life.

I will venture to tell you in three words where, in my humble opinion, the risk lies. The classic style is admirably adapted to the setting and solving of intellectual problems. Its values

are definite, and the very fact that it is not mixed up with any vulgar sentiment of any kind make it all the better vehicle for technical calculations. It is, in short, a first-rate professional medium. Besides that, the architectural profession itself is a big one. There are thousands of architects, quite enough, with their schools and institutes and newspapers and associations, to form a consolidated body of opinion. Is it not easy to conceive such a body, armed with expert and exclusive knowledge, running architecture on a professional basis with classic as its professional style? That is the danger. It is easy enough, when your profession is large enough to generate its own praise and blame, to find that praise and blame sufficient; to forget how much more than merely professional a living art always is. I have known more than one architect enthusiastically sure that he was engaged on vital works of art, and all the time I knew—I could not *help* knowing—that he was only engaged on professional experiments. No one who has ever felt what the art of architecture has been, and may be, and ought to be, to life, will say that this danger—the danger of the art becoming professionalised—does not exist at present. It exists. It is the last and deadliest danger that follows on the adoption of borrowed forms of architecture.

DISCUSSION ON MR. MARCH PHILLIPPS'S PAPER.

MR. REGINALD BLOMFIELD, R.A., *President*, in the Chair.

PROFESSOR W. R. LETHABY [F.]: It is a great pleasure and honour for me to be allowed to propose a vote of thanks to Mr. March Philipps for what we shall all agree—however much some may disagree with the substance thereof—is a most delightful lecture in form, delightfully smoothly written, and said with charming humour and seriousness. There are scores of things I should like to touch on with reference to what he said: one is the "Juggernaut style of Rome." The phrase goes to the root of it! One has seen it in scraps all about Europe, from Rome itself, though not so markedly there, but where, in its provincial barbarities, at Trèves and Cirencester, the ultimate Juggernautness of the thing came out—the simple brutal rudeness, the tyranny of the style. But still, the reasoning and the sympathetic putting of these things do not convince all, because we have a great division of spirit. Of course many of us love the tyranny of style, and there is a great body of opinion which would impose a tyranny of academic style upon us. It is extremely difficult for me to speak on this, because I agree so entirely with Mr. Philipps, and we have a disinclination to bring our hearts and our intellects out of their cages too often. We have to protect ourselves with a hard shell; we bring our shells here, and at most of our meetings we rattle up against other shells. While congratulating Mr. March Philipps I think I can fairly congratulate this Institute also on having shown a liberality of spirit in asking him here. I can hardly conceive that many corporate institutions would do a like thing. I can hardly conceive the official Law Society, whatever it may be, asking him to write a paper on "Joking Judges," for instance. So I do think we have shown

a certain generosity. But even in this generosity we know how to protect ourselves fully. We knew exactly what he would say; we know exactly what we shall say afterwards. We say: "It is Ruskinism, and Ruskinism is all rot." "That has been proved for a dozen years," we say; "that is settled." And since a fortnight ago we have been told all about art. Art is "significant form": that is the last word; and so on, and so on. Really what we think is that "art is the work of artists; and we are artists, and we do it." There is one consideration I would like to offer to Mr. March Philipps himself, and that is, that we architects, too, are a part of life; and it is the life behind the architects that I wish very much he would bring his fine thought and inferences to bear upon. We architects are a part of life. Only three nights ago I dreamed I met an older architect, to whom we all more or less look up. And I was speaking about this business to him in my dream, and he said "There is no going beneath the ground plane." As in dreams we think things are wonderful, I thought "What an amazing phrase! That sums up the whole business, and is couched in the most perfect form; it crystallizes all architectural wisdom." I knew he meant you cannot go outside the stream; you are yourself part of the stream; you cannot go outside environment; you yourself are conditioned by it. And as a matter of fact we architects are changing all the time; changing every week and fortnight. In the last three or four years, for instance, we have had a great outburst of authority. Authority is upon us, and we architects respond; we are all for authority. And even now, so quick in response are we that we introduce forcible feeding in our education. That

is one point I would make. We are a very composite body. Our consciences are divorced from our needs. We knew very much what Mr. Philipps would tell us, but it is not much good. If, however, he will alter life outside he will find how quickly we architects respond to it. We people who would draw lessons, as Mr. March Philipps did, from history, are met with the common retort, "Oh yes, you idealise the past," and then they upset some trivial facts of our history or archaeology. But we know we do not idealise the past; we see it clearly. We know, as a matter of fact, that an age which produced beauty must in itself have had a beautiful life. No one can gainsay that in his heart. Further—again I address myself to Mr. March Philipps—it is the deadness of our town life which produces the deadness of our architecture: the unutterable deadness which has come over England in the last forty years, the absolute stagnation and daily dying of the towns up and down the country. I was surprised about three weeks ago at seeing an article by a hardened political economist—a man whose name we do not mention here—who managed to miss his train on a drizzly day at Oldham, and he had to hang about the station for an hour. And in that hour something happened to him. Having nothing else to do, he began to think. And that political economist saw Oldham, and it came home to him that that was England; that there were dozens and hundreds of these Oldhams all over England. England is becoming like Oldham. Now until we heighten the life of such towns and can get them to rebuild themselves, and put themselves into order, and clean themselves, nothing will happen to architects or to anybody else. But in the rebuilding of our towns, if we could set about it, we might find some vitalising principle in our architecture. I am merely applying Mr. March Philipps's own view that architecture is life: and if we can begin to live in our towns we shall instantly again have live architecture in our towns. I remember myself how beautiful were our towns throughout England forty years ago. In the poor little town in which I lived no vulgarity had touched it forty years ago; it was a thing which had grown: it was a work of art and beauty, a work which Turner would have painted. But now it is wrapped round with railways, and exploited and miserified, and the shops have been turned into emporiums for picture postcards. It is that which conditions our architecture; it is to that I would love to turn Mr. March Philipps's attention, if I could. Until the spring of life bursts out in our towns, what does our architecture matter? Nothing at all until some public work comes about to give us a tradition. We have, in the meantime, merely to satisfy the whims of generously minded employers. We dine at their tables, and hear their views on politics, and swallow their caprices year in and year out; and until we have a life independent of that trivial hanging-on, no architecture is possible. In fact, one

of the most important things in modern architecture as she is done is the Art of Dining Out.

MR. E. B. HAVELL: The pleasant duty has been assigned to me of seconding the vote of thanks for the most admirable and lucid lecture we have just listened to. I think Mr. March Philipps's main argument is quite incontrovertible. An architectural system based upon borrowing, either as a constructive or a decorative principle, is as prejudicial to healthy artistic growth as a persistent habit of borrowing from one's neighbour in terms of pounds, shillings, and pence is contrary to sound domestic finance and harmful to social amenities. Perhaps the long time I have lived in India inclines me to look upon these questions from a subjective rather than from an objective point of view. Subjectively the vital issue is, not whether the buildings of our time express truly the spirit of the age, or please the public as much as the Parthenon pleased the people of Athens, or the Pantheon the people of Rome, but whether the methods by which they are produced are calculated to develop to the highest possible degree the creative faculties which are in all of us, architects, craftsmen, and the lay public. If so, our architecture is national art in the highest and fullest sense; if not, we are wrapping up our talents in a napkin and consciously or unconsciously neglecting some of the highest faculties of our human nature. It is beside the mark to argue that our methods of building are similar to those of the Romans, even if we admire them. It would not alter the logical position if it could be shown that our standard of architectural ethics is as high as that of the Greeks. We live in the twentieth century, not in the fourth century B.C. We are not meant as human creatures always to walk backwards with our eyes fixed on the past. There is the familiar argument that the classic tradition is ingrained in the British constitution and has become part of our intellectual birthright, so that architects and other artists have as much right to draw upon it as they have to draw cheques upon their own banking account. But is what we call the classic tradition, in the true sense of the word, either national or classical? Or is it simply a pedagogic formulæ which stunts the imagination of the male Briton from the time he is put into knickerbockers until he leaves school or the University? Did the Greeks attain to their high intellectual and æsthetic culture by the methods which we call classical? Did the young Greek compose odes to Pallas Athene in impeccable Cretan or Egyptian hieroglyphs, or rack his brains over barbarian syntax and grammar? Did the Greeks learn to draw from plaster casts of the antique, or even from the original sculptures of Phidias or Praxiteles? Did they collect art treasures from all quarters of the earth, lock them up in museums and galleries and leave the artistic intelligence of their children to be dried up in school or to take care of itself? Certainly not. Greek education was

not a system of mental gymnastics, but a careful training of the innate creative faculties through the finest culture of the æsthetic sense. In this matter British architects and artists generally are only victims of a pedagogic tyranny for which they as artists are in no way responsible. Mr. March Philipps is doing a great service to art by raising discussions on these questions. I only wish he would boldly direct his attacks on the enemy's centre—the public school and University system—and try to persuade all the Associations of architects and artists in Great Britain to join forces with him. It is our sham classical education, and especially the neglect of the intuitive creative faculties in children, which are mainly responsible for the decay of our national traditions in art, architecture, music and the drama. When the classical obsession is relegated to its proper place in our educational system, the technical methods of architecture which now create an artificial barrier between the craftsman and the architect can be more easily improved. We can then take British art out of the ornamental flowerpot into which the Renaissance removed it, and plant it again in its native soil.

MR. H. V. LANCHESTER: As a piece of design for which I am (in part) responsible has been put in the pillory before you for some five minutes, may I not claim to occupy a few moments in reviewing some of the suggestions made to us? With regard to the particular design in question I have already in this room made my defence and will say no more upon that now. Mr. March Philipps has certainly given us much to think about, and the question is whether we are altogether wrong in following the traditions which we most of us accept at the present time, whether the traditions of the Renaissance are wrong, and whether we should not go back and pick up those of the Tudor period. I daresay, as Mr. Lethaby has pointed out, it is simply stated as giving us Ruskin and no more. But there is a little more than that. If we were going back to the Tudor tradition—I do not suppose we are, but if we were—are we satisfied that the Tudor tradition represents what we want to-day? Does it represent the spirit of to-day better than what we have got at the present moment? I very much doubt it. I am not altogether satisfied with what we are doing at the present moment, and I hope that in the future we shall be able to do something very much more vital, and be inspired to much higher flights than most of us are at the present, owing to the attitude of the callous public. But I do not think that the tradition which Mr. Philipps forces us back upon is any solution of the difficulty. I do not think that Tudor, with all its genius—because there was immense genius in the Tudor work—does represent the spirit of the present age by any means as nearly as the best work that has been done during the last two centuries. I will add no more, except to thank Mr. March Philipps for his very interesting paper, and to ask him really to see if he cannot reconsider his position with regard to

the merits of Tudor architecture as adapted to the demands of the present day.

MR. EDWARD WARREN, F.S.A. [F.]: I have listened with the greatest possible interest to Mr. March Philipps's Paper, a great deal of which seemed to me to be incontrovertible, and much of which I recognised as the obvious truth. I think the trend of the Paper was extremely wholesome for architects. It was as bracing as "eight hours at the seaside." It is a very good thing for us to have these home thrusts administered with wit and geniality on an occasion of this kind. With regard to Mr. Philipps's estimate of Tudor architecture, I think he is very much too early in his assumption of the period when the Renaissance manner began to take hold of English architecture, because in Tudor days such hold as it did take was extremely minute. It was not until Jacobean days were well advanced that a clearly understood attempt at Classic architecture crept in. A few porches and chimney-pieces here and there, a few misunderstood arabesques, misbegotten Caryatids, and grotesque pilasters did not convert Gothic architecture into anything like Renaissance. And I think he is straining the point somewhat in indicating that the increasing horizontality of architecture, the square window-heads, and the squat four-centred arch were the beginning of the Renaissance. I do not believe this. I think they were the mere logical outcome of the trend of things in English Gothic architecture. And since you find a four-centred arch occasionally nearly as squat in the fourteenth as in the fifteenth century, it is fair to suppose that this did not come as a premonition of the trabeated manner or as late fifteenth-century borrowing. You find four-centred arches, though rarely, in the nearly contemporary architecture of France. I do not think we can look upon the first naïve evidences of vaguely Renaissance forms in Tudor architecture except in the light of a sport, and cannot for a moment accept the Tudor manner as being, in Mr. March Philipps's words, the beginning of Northern Renaissance. I was much interested in his rather amusing remarks as to the first invasion expending itself principally on porches and chimney-pieces, but I think that came about for obvious reasons. The porch and chimney-piece had been, for two centuries previously, features upon which English builders were wont to lavish particular attention, and, therefore, it was very natural that for those features they should call in specially skilled hands from the neighbouring large towns, and those special men would be somewhat versed in the new ideas, and the Renaissance thus took first hold upon the particular work entrusted to them. You will find it in many church monuments, and I do not think any other reason is assignable for it. I suppose it may pretty safely be assumed that the first centre in England which became thoroughly imbued with the new ideas was Oxford, and yet Oxford was the most conservative stronghold and tenacious supporter of Gothic architecture. Some of the instances Mr.

March Phillipps showed us are clear evidences of that fact. Indeed, the well-known and extraordinary Gothic anachronisms in Oxford have no other explanation than the extreme conservatism of those who paid for and prompted them. I shall not say much more in criticism, but I wish to express my extreme admiration of and interest in the paper. Even where, as I occasionally did, I disagreed with the lecturer, I felt stimulated, and prompted to think more about things thoroughly familiar to me. One thing further I will say is, that as it is obviously impossible for architecture, like any other art, to escape from the influences of its age, due allowance must be made for the extraordinary range of ideas, the complex impressions of travel, and the jumble of fashions and habits that we have to-day. It is necessary, therefore, to try and reassert or re-establish some sort of tradition; a tradition which might stimulate not only students of architecture, but workmen. It is necessary that workmen should have some law to guide them, in place of the alternate individual dictates of the architects under whom they have to work. What we want is not so much a point of concentration as a point of departure; for until we find some point of departure it is futile to engage in the quest of a native unborrowed and cognate manner, and futile to hope that architects can assert their individuality and work out any such evolution from the mere use of materials and construction. We want, in fact, to have some element of acceptance which will, in the extremely complicated flux of architectural ideas, cause crystallisation or bring us some useful precipitate.

Mr. H. G. IBBERSON [F.]: I suggest that the evil genius of the art of architecture has always been the literary man. To go back a good way, the Romans were happily and successfully building beautiful, simple, round arched things like the aqueduct at Segovia when the literary person of the age declared that true chasteness is to be found only by using the straight lines of Greece. The man in the street combined with the literary man (they have much in common), and the unfortunate architect was forced out of the way of his inclination into the path of dulness. Later, at the Renaissance, the men of words (again in conjunction with a simple public) force the builder's hand and make him, after a pathetic struggle in England, forsake his homely Tudor. Later still, when, with the help of Wren, we had got used to our borrowed clothes and made them part of ourselves, the romantics and neo-Catholics arrive, and we are driven with fearful suddenness into all kinds of Gothic. Now apparently we are to be denuded of our accumulated rags as the best means of clothing the nakedness of reinforced concrete! I have been looking at these drawings on the wall.* How alike they are in style! Do all these young men

really love the same lady, or has our President with his pen made her the mode? Cannot we be honest pirates, for once give up doing what we are told we ought, and save our souls by doing what we like?

Mr. G. H. WIDDOWS [F.]: I understand that Mr. Phillipps's objection to present-day architecture is that it does not express the life of the people. Is that correct? Is not the pressing hindrance to good architecture to-day the love of wealth for wealth's sake? Does not the love of wealth for wealth's sake go to the upsetting of the production of good work? Rome set out to conquer the world, and her object was to increase her wealth. What was the result? She took hold of the architecture of Greece and made a mess of it. We come to the Renaissance. What happened there? We have a great output of wealth, a great increase in trade, everybody out for making money, working for money for its own sake. What was the good of the architecture of Greece to them? That was an intellectual effort, but the making of money is not. And they could not understand the conscious effort that the Greeks put forward: it was no good turning to them. But while the making of money is not an intellectual effort, it is not spiritual either, and so they could not understand the Gothic work with its subconscious influence, its high ideals and noble aspirations. They turned to the Romans for their instruction and inspiration. Now at the present day there is another outburst of Classical feeling. But is that not due to the fact that at the present day we are still worshipping wealth for wealth's sake? Does not that stifle creative genius? As Professor Lethaby has told us this evening, until we have altered the outlook of life is it any good expecting a better order of things than we are getting? Shall we not still continue to borrow? We have first to improve the people's thoughts and ideals, then we shall be getting improvement in matters generally. I think Mr. March Phillipps is not altogether correct when he says that the architecture of the present day does not express the life of the people.

Mr. A. E. RICHARDSON [F.]: I have listened with great attention to Mr. March Phillipps's various comments, but I have not heard any refutation of the idea of borrowing. We are all borrowers, and we shall continue to borrow in architecture until the end of the chapter. It has been so throughout the ages. Mr. March Phillipps fails to distinguish between the provincial and the academic in architecture. He holds a brief for the provincial, and fails to understand the value of composition, which is paramount. Mr. Phillipps showed on the screen various pictures to indicate that the Roman arch had great strength, but failed to point out the reason for the fine effect in composition, for the simple reason that he does not understand composition. Architecture relies above everything on its composition. Mr. Blomfield has lectured for years and taught us that, and now we are

* Designs for a fireplace in the main reception-room of a Town Hall, submitted as Testimonies of Study for admission to the Final Examination.

turning to the fine Classic, and I say that the Classic tradition of the future will be greater than that of the past, and that Mr. March Phillipps's lecturings and writings are as the waves of the sea lapping against the rocks.

MR. HAROLD BAILEY [F.]: I had the misfortune to have to write a letter in answer to Mr. March Phillipps's letters which appeared in the *Morning Post*. I say misfortune because I am not given to writing letters to the papers. But a friend sent me Mr. March Phillipps's writings and asked my opinion upon them, and I thought it would be the simplest course to send my answer to the Press. I have listened with very great pleasure to the lecture, and what I rather expected has taken place. Modern architecture has been discussed to its detriment; but although we have heard how the architecture of the present day is all borrowing, has any instance been given or any suggestion been made as to how we ought to do it, or how we should better it? In my letter I maintained, and I maintain still, that it is absolutely impossible to create a style in the present day. As soon as travelling became common, and literature also, so soon did the styles drop, as they were bound to; and even one so young as myself has seen in the last twenty years how the enormous number of books have helped to create the different styles that we see in the present day.

THE PRESIDENT: We have had a brilliant evening, and I confess my brain is in a whirl—Greece, Rome, Renaissance, Tudor—I do not know where we are. And we have had some fine, edifying social and political sentiments, which I feel are outside my beat altogether. But we have undoubtedly had a very stimulating evening. As we know, Mr. March Phillipps handles a most delightful pen, and anything he says or writes we listen to or read with ease and real pleasure. I think he comes down here partly as a matador, as one who puts quills and arrows and darts into the mad bull of architecture; and, like an Irishman, he also trails his coat, and I think he succeeds most effectually. He has drawn out some very different sentiments to-night, but I confess I feel totally unrepentant and unregenerate, and I am content to have the lie in my soul and all sorts of other misconceptions of architecture, because I feel, after some thirty years of struggle in this art, that I ought to know where I am if I do not. Mr. March Phillipps has given us some suggestive criticism, but I do not agree with him either in his history or in his philosophy of art. I hope Mr. Phillipps will not mind my putting this to him; I am sure he will not, because a man of his ability and sportsmanship will not mind a plain criticism of certain axioms, as Mr. Phillipps assumes them to be, on which he bases his generalizations. To me they are neither principles nor axioms, but personal impressions of the history and the meaning of architecture. One is that architecture is not sound

unless it is construction made visible. I hope I am not misrepresenting him, but he will reply, and have the last word. I have never quite reconciled myself to the statement that the whole of architecture is wrapped up in the visible expression of construction. This was a sentiment which resulted from the florid morality and aggressive science of that remarkable epoch, the Middle Victorian period. I think, as Mr. Richardson pointed out just now, that the problem of architecture is not with details, individual features, or anything of that sort; it is the grouping and composition of these features. That is what we mean when we talk about composition, proportion, mass, spacing, rhythm, and the other qualities—nebulous terms, but real qualities—which form the groundwork and the problem of architecture. And I would ask Mr. March Phillipps with regard to an instance which he showed on the screen—the roof of the Divinity School at Oxford, I think it was—in the Tudor style, he said. There I saw some great pendants let into the ribs. We know how they are constructed, but I do not think that is a sincere visible rendering of construction at all; it is a mason's trick, and nothing else. Those who study late French Gothic and early French Renaissance in such places as Saint-Pierre at Caen know it was done for effect. There was another point I noted. It was laid down that it was impossible to combine with any sincerity or likelihood of effectual architecture the arch and the lintel. I think any man who has worked as a builder will know that is exactly what you do want to do; you want to make certain of things, and you put an arch in the centre, and that has got to have abutments and solid masses. On the other hand, the abutments are too solid, and so you pierce the narrow opening and span it with a lintel, and you have that well-known form, the arch in the centre, and one or more openings on either side spanned by lintels—in fact, it is that combination of arch and lintel which is most valuable and effective in all modern architecture. There is another point, the supposed spiritual quality of Gothic. It is asserted that no other manner of architecture can express spiritual emotion. Why anybody should say that any one form of architecture is more spiritual than another I cannot conceive. I presume the early Christians were spiritual, and yet they worshipped in the Catacombs. Mr. March Phillipps talked of the symbolism of "the upward rushing rib." That is a pretty notion, but it can be equally described as the "downward rushing," because that is its function, seeing that it is carrying weight down on to the top of the piers and discharging that weight to the ground. And if you treat it as a "downward rushing" rib and combine it with the "Last Judgment," to be found in the tympana of many mediæval doorways, you are as likely to think of hell as you are to think of heaven! One more point I have to make, and that is on this question of Tudor style being the last word in English architecture. I shall not quarrel with Mr. March

Phillipps on details of history, but many of his illustrations were not Tudor, they were Jacobean. There was one gateway that he made a point of, with the accretions of detestable Classic clustered round the archway! But it was all of the same date; all equally good or equally bad. I must point out, as a student of history myself, that after all, "trivial facts" are evidence in history, and it is upon the multitude of these that the right appreciation of tendencies and meanings must be based, and we cannot ignore these trivial facts. We have to study them accurately and thoroughly until we know what they mean when interwoven with each other. But surely if architecture is to be what Mr. March Phillipps wishes it to be, the expression of the life of the time, how are we to cram our busy, crowded life into Tudor architecture? We can make a travesty of it; we can translate the rooms of our houses which have to be wide and spacious into a travesty of Tudor architecture. But it is not Tudor architecture. Tudor architecture may have been comfortable in a rudimentary stage of civilisation as compared with the stage in which we live. Perhaps it is unfortunate we live at this stage, but we do. We come back to the point which Professor Lethaby made in his delightful speech—I hope I am quoting him rightly: "You must not get below the ground plane." That has a very wide interpretation, because it means we must accommodate ourselves to the facts of our environment; it is not for us to put ourselves back two hundred years, or to project ourselves hundreds of years forward. We are living under certain conditions with which we have to comply, and if Mr. March Phillipps were to address his studies in architecture from a different point of view—that is, if he were to look at history and take a progressive view rather than a backward one, he would find that English architecture did not end with Tudor architecture; that the creative impulse of our fellow-countrymen was not extinguished in the fifteenth, sixteenth, or the seventeenth century. And it is not to be supposed that anybody in the world can wipe out such an achievement as St. Paul's Cathedral, probably the greatest individual monument of architecture in the history of the world. It is one man's work. You may dislike it if you please, but there it is, the result of one creative impulse. And I say if there ever was a house in the world which was characteristic of a country or people or nation, it is the quiet English Georgian house as we all know it. Had architects been allowed to continue peacefully their development of that phase of architecture, we should not be where we are. As Mr. Ibberson said, the real enemy of the architect is the literary man; he is the man, from Horace Walpole onward, to whom we owe the total floundering of architecture in the eighteenth century. And we have not yet got complete control of it again. But still I think we are getting back a bit of our own, and I agree with what one of

our speakers said to-night, that the future of architecture is still with us, and I think it is likely to be so. Before I put this vote I would like, on my own behalf, to thank Mr. March Phillipps for his extremely eloquent address—I do not agree with a word of it, but that does not matter—it has been a delightful one, and I admire his courage in coming here to-night and bearding the lions in their den.

Mr. MARCH PHILLIPPS, in reply, said: There is one feature in this show which I greatly appreciate, and that is that I have the last word. But even so, I shall go home feeling that I have failed, because I have not converted Mr. Blomfield, and that really was the particular object I had in view this evening. There are one or two points I will touch on in the discussion. In the first place, it has been taken for granted by both Mr. Lanchester and Mr. Blomfield that I not only admire the Tudor style, but that I am proposing that everyone should imitate that style. Nothing is further from my thoughts. I have no intention of trying to rake up any dead style. What I like about the Tudor style is, that the men of those days faced their work honestly and with entire self-reliance. They had no idea whatever of trying to imitate anything, or of doing anything for gentility's sake, or because it was the fashion. They worked out the ideas of their age in the material of their age. It was sincere, honest work done. That is the spirit that I want to see revived. I do not want to see the things they did, the forms, revived. On the contrary, I was speaking about this ferro-concrete which we use nowadays, which I think might be a splendid material, and supply us with forms and stylistic ideas of its own, if we would use it with sincerity; if we recognised, that is to say, that our style is in that stuff, that material, as applied to the necessities of life. And I say the reason we do not face this fact in the honest spirit in which the Tudor men faced their work is because we are led astray by irrelevant and absurd classical ideals which we think are respectable and genteel; the kind of thing which shopkeepers want put up because it looks like money. Then there are one or two minor points. The Chairman spoke of upward and downward rushing lines. But wherever you get a vertical line you will find your eye will run up that line, not down it; therefore all vertical lines are upward rushing lines, not downward. It is for this reason that the effect of a Gothic cathedral is, as Freeman said, that it appears to lift the whole edifice into the air. I do not say it is the only spiritual architecture which has been created, but every stone in it is spiritual. Mr. Lethaby made a most delightful and, to me, most interesting speech. He was speaking of the life of this present age, and saying it was no good fiddling about with architects, because architects were everything they could be; but the real difficulty and fault of the thing, the spoke in the wheel, was that life was not

prompting the architect. That is true; I am a great believer in that. Whenever I see a movement in architecture, I instinctively look to life; and I agree there will be nothing new done in architecture until forces are generated in life which will influence art. Yes, but what is so extraordinarily interesting about life in the present age is that those forces are being generated in life. The influences which were behind and were backing up the Renaissance tradition right through the eighteenth century, that period which we know was distinguished so much by the dominance of the aristocratic class, are waning. It does not need words of mine to prove to you how admirably Renaissance architecture is adapted to the expression of the spirit of a fastidious, stately, aristocratic culture and taste. The whole style reeks of those associations. Its formal suites of apartments, and the stately order of its planning, so much above the comprehension of the ordinary man, do certainly achieve the finest possible expression of the aristocratic ascendancy of the time. But where now is that ascendancy? You talk about the endurance of the Classic tradition, of the Renaissance tradition, which is the aristocratic tradition in art. But I tell you you cannot make it endure. And the reason you cannot make it endure is that life itself is abandoning that tradition; it is no longer the main motive in English life. There is coming into English life a different spirit. I do not mean a socialistic spirit, but a broad sense of the worth of humble, ordinary, human existence; the value of the labourer and his work. These broad human considerations are entering into English life, and they constitute the transition which we are standing in at the present moment. Things are gradually veering from the aristocratic to the democratic or the national standpoint. There is nothing to be afraid of in that. The simplification of art, the return to national ideals in art, will inevitably bring about the co-operation once more of labour in all creative effort; and when this happens, when the workman is able once more to take some pride in his work, when labour is ennobled as it was of old, and the tradition of an honourable distinction restored to that class and rank of people, is it not certain that the whole social fabric will be endowed with a renewal of that strength and stability which it has long lost? I say that the new spirit which will inspire art and architecture with a fresh vitality derived from the national life is to be welcomed by men of all parties and all shades of opinion; and if I were a young architect I would go out to meet that new spirit and adapt my work to its expression. Let me say that I am deeply obliged to you and to Mr. Blomfield for your most kindly criticism and for your generous welcome to me here this evening.

REVIEWS.

BAROQUE ARCHITECTURE.

Baroque Architecture. By Martin Shaw Briggs [A.], Author of "In the Heel of Italy." With 109 Illustrations. Sm. 4s. Lond. 1913. One Guinea net. [T. Fisher Unwin, Adelphi Terrace.]

Mr. Martin Shaw Briggs has been for some time a thorough student of an interesting period of architectural development in Europe. In "The Heel of Italy," which made its appearance some four years ago, he describes Lecce, a town little known to the traveller. This book has since been honoured by being translated into the Italian. He has also written essays in the *Architectural Review* and the *JOURNAL R.I.B.A.* upon his chosen subject. But the book now under review is of a monumental character and seeks to embrace all the best of the work which can be classified under the heading of "Baroque." There are upwards of a hundred illustrations, the majority of them being from photographs, but others are reproduced from the clear if sometimes rather uncomplimentary sketches by the author.

Mr. Briggs first sets out to define his subject. "The Baroque period," he says, "dates from the time when architecture began to revolt against the pedantic rules of the Later Renaissance schoolmen, and it lasts until they tired of their pedantry once more." There are some counter-thrusts at Ruskin and Fergusson for their wholesale denunciation of the author's period, but happily he is too well equipped an historical scholar to content himself with contradictions of what were, after all, aesthetic standards set up by a bygone generation. But such blows as Mr. Briggs indulges in are vigorous and—one would have thought—rather in the nature of wasted labour at this time of day. The real interest of the book begins when the author describes how the counter-Reformation in Italy and the rise of Spain led to conditions which evolved naturally and almost inevitably the Baroque style. More than half the volume is taken up with the description of the style in Italy—the birthplace of Baroque art. The work of Bernini, that giant of the seventeenth century, is analysed, and the fact is pointed out that he began as a sculptor and remained a sculptor even when designing his most grandiose buildings in Rome. Bernini was apt to forget in his too free adoption of the curved lines in architecture the structural value of straight lines; and in doing so left a legacy to his less brilliant successors which in their hands degenerated too often into restlessness and theatricality. The seventeenth century saw the Popes actively engaged in beautifying Rome, and they came to realise that the setting of their palaces was of equal importance with the façades. The gardens of the Vatican, the Quirinal, and the Colonna palaces were laid out in the Baroque manner. The great majority of the fountains with which the Popes delighted to adorn the city belonged also to this period. Moreover, town-

planning was keenly studied and practised in a finer and more spacious manner than ever before. The Piazza di San Pietro, the Piazza del Popolo, and the

richest merchants in the world. At Genoa the staircase was so elaborated as to become the dominant feature of the palazzo, and the fashion for fresco-



MORELIA, MEXICO: CATHEDRAL.

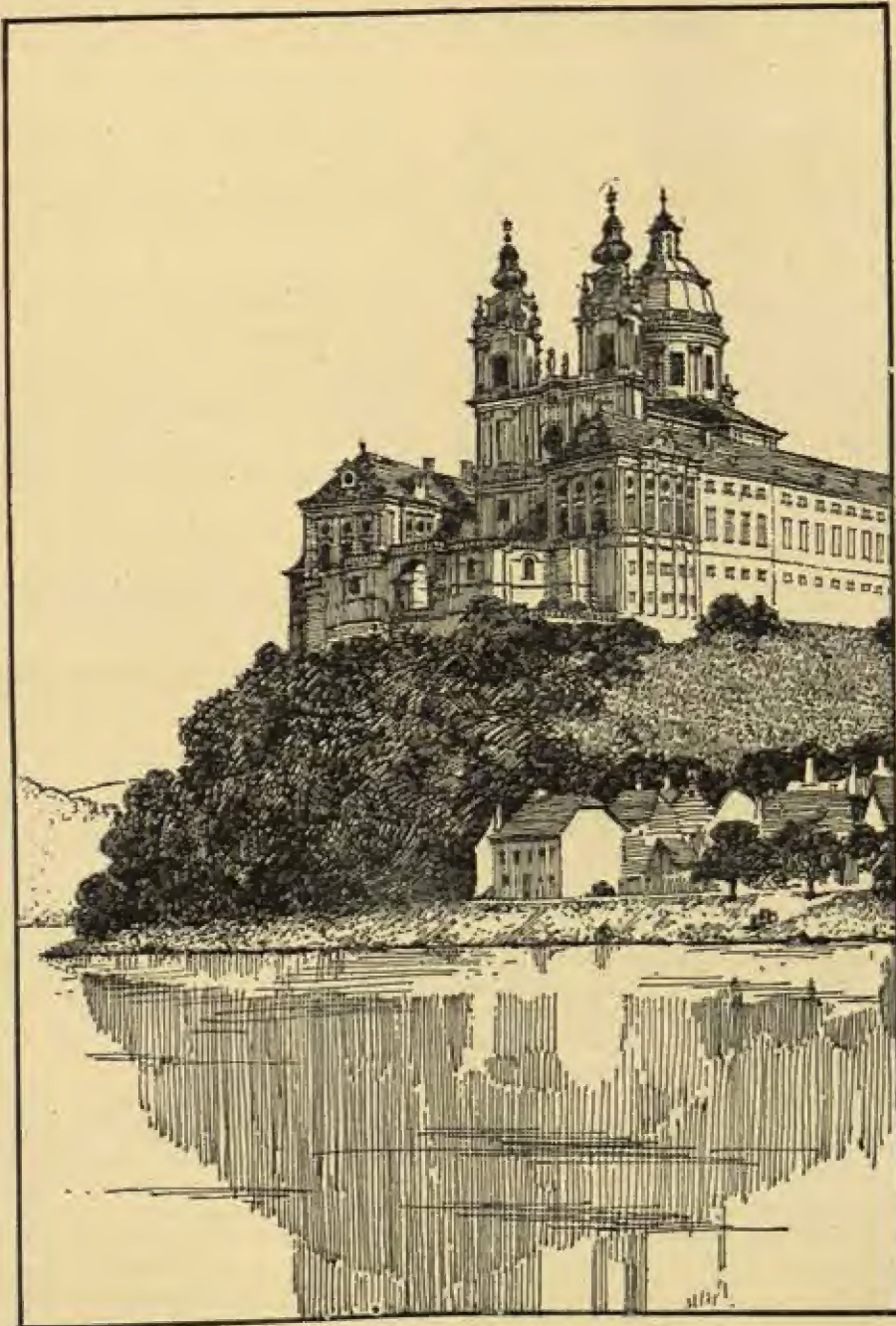
From Baroque Architecture.

surroundings of Santa Maria Maggiore are only a few instances of such work in Rome.

From Rome Mr. Briggs passes to Genoa, with its wonderful Via Nuova flanked by palaces which formed a fitting background to the gorgeous costumes of the

painting on the outer walls was developed to its uttermost limits. A photograph of Longhena's great church of S. Maria della Salute at Venice, perhaps the finest example of the Baroque style, forms an appropriate frontispiece to the volume.

The subtle difference of character between the work of the Baroque period in Northern and Southern Italy is pointed out, and the author shows how the is appended an excellent list of books of reference. Spain and Spanish America, Belgium, and Holland are also treated of, and finally ten pages are devoted



KLOSTER MELK.
From *Baroque Architecture*.

foreign domination of Naples caused its architecture to be saturated with Spanish influences.

There are chapters on Baroque architecture in Germany, Austria, and France, and to every chapter

to the Baroque influence in England. It is pointed out that in England the early Baroque influence is intangible rather than concrete, and the reason for this is traced in the political events which rendered

this country essentially Protestant and free from any overt Jesuit invasion. It is not until the days of Vanburgh, who was charged with the grandiose and exotic scheme of erecting a palace of unlimited dimensions as a thankoffering from the nation, that recourse had to be made to the full-fledged Baroque in order to express ideas of ostentation and pomposity which are essentially alien to the English genius.

The book is interesting throughout, and a great amount of research work has been expended in writing for the first time in English a survey of the Baroque period. It is not written with any vain hope of introducing another "revival" into this land weary of revivals, but with the motive of tracing the logical change from the Renaissance to a time when the worship of Antiquity had ceased to charm and when an effete aristocracy and a dominating Church were all-powerful in Italy and Spain. Meanwhile the more virile nations of France, Holland, and England absorbed only the more sober and practical features of an artificial and ostentatious style. But, as the author points out, some of the best of the modern work in England—such as the great group of monumental architecture at Cardiff—owes more than a little to the influence of this movement. Further work from Mr. Briggs' pen will be looked for with interest. He belongs to the modern school of architectural writers who recognise that good work was done in all ages and that the theory of evolution applies to buildings as irresistibly and inevitably as to the realm of Natural Science.

SYDNEY D. KITSON, F.S.A. [F.].

OLD YORKSHIRE HOUSES.

The Old Halls and Manor-houses of Yorkshire. With some examples of other houses built before the year 1700. By Louis Ambler [F.]. Illustrated by 91 plates from photographs specially taken by Horace Dan and others; with 20 plates of measured drawings and numerous illustrations in the text. Sm. 4s. Lond. 1913. 35s. net. [B. T. Batsford, 94 High Holborn.]

All students of domestic architecture will be grateful to Mr. Ambler for this record of the old houses of Yorkshire. With a few exceptions they are not very showy; they do not compare in grace and in richness of detail with the fine houses of the Midlands and the southern counties; but they have a peculiar interest of their own, arising from the surroundings in which they were built. They are the result of the hard stone and high winds of the district. Their detail is plain, owing to the nature of the stone; they are in general low, and their roofs are of flat pitch, owing to the roughness of the climate on the exposed hills and wolds of Yorkshire. An acquaintance with them gives point to the tales of the Brontë sisters, and in particular adds to the poignancy of those wonderful chapters at the beginning of *Wuthering Heights*.

They are nearly all built of stone: a few examples are given of half-timber houses, but they are not nearly so fine as those which are still to be seen in

Lancashire and Cheshire. Burton Agnes is of brick with stone dressings, but this house is hardly typical of Yorkshire; it has much of the elaboration associated with the south.

In his Introduction Mr. Ambler tabulates the features distinctive of the district; the door-heads, across which the mouldings of the jambs are carried in fantastic curves; the finials generally severe and even coarse in outline; the label terminals, which are frequently formed into quaint scrolls. These are peculiar to Yorkshire and, in part, to Lancashire. The screens, ceilings, and panelling are of a more general character, and they go to show that plain as much of the detail is, yet many of the houses were quite richly decorated; the ceiling at Hawkesworth Hall, for instance, must be well worth seeing. At Gilling Castle, again, is some of the finest sixteenth century glass in the country.

Altogether some hundred and fifty houses are illustrated, and although many of them are small manor-houses, there are also such important places as Markenfield Hall of the fourteenth century; Burton Agnes, full of interesting detail of the early seventeenth century; Woodsome Hall; Fountains Hall; Temple Newham, with its balustrade of letters; Marske Hall, with its three domed turrets, and others. The record is not carried beyond the seventeenth century, indeed there are but few houses illustrated which have not mullioned windows. The scope of the work does not include places like Castle Howard or Bramham Park.

The illustrations are mostly from photographs, but there are some capital measured drawings and not a few plans. In addition to the Introduction, which deals with the facts as a whole, and with their interrelation, there are a few lines of text descriptive of the history of each house. The book has a distinct and definite purpose, which it achieves, and it deals with a subject which deserves more attention than it has hitherto received. The technical production is of the high class associated with Mr. Batsford's name.

J. A. GOTCH, F.S.A. [F.].

Kettering.

ANCIENT MONUMENTS: A YEAR'S WORK.

Report of the Inspector of Ancient Monuments for the Year ending March 31st, 1913. 4s. Price 6s. [H.M. Stationery Office.]

The Report of the Inspector of Ancient Monuments may be divided roughly into three parts: a brief and concise record of the work carried out on each separate monument, a short historical account of the twenty-two monuments taken over during the year, and technical appendices by the architect then in charge of the Ancient Monuments and Historic Buildings Branch. The whole is prefaced by a memorandum written by the First Commissioner of Works after the expiry of the official year, in which the Ancient Monuments Amendment and Consolidation Bill, just then passed into law, is described, and

the policy of the Commissioners with regard to it set forth; the necessity of acting only on the advice of experts is emphasised, and the work of the special staff commended.

At the end of the year (31st March 1913) there were 140 monuments under the care of H.M. Office of Works. They are of the most varied description, from the traditional grave of Fair Helen to the stately pile of Carnarvon, from the fane of Jedburgh to a mile and a half of Roman road, and are dispersed over the widest area, from the Orkneys to the Channel Islands, from Harris in the Hebrides to ancient Rutupia. As may be imagined the work they involve is of an equally varied character. This is the preserving of the existing work, the warding off of future damage, ascertaining where possible the old arrangements of the various buildings and rendering them more accessible to the public.

It is only natural that works of immediate necessity should figure most largely in the Report. The intensely interesting account of the causes of the settlement and fractures in the east curtain at Richmond Castle, together with the old and present attempts to prevent further sliding, forms a fascinating chapter. The perilous condition of many of the old buildings makes it a marvel how they remain standing. In the west tower of Ruthven Castle ("Hunting Tower"), Perth, the north wall had been reduced to 1 foot 6 inches up to the level of the third floor, the extra thickness above bearing on beams which at one end rested on a 4 feet pier carried by the stone lintels of a passage whose side wall was only 7 inches thick! This is only one of many cases where immediate steps have had to be taken for the preservation of a monument. Parsimony is not a modern vice with regard to reparation. The eighteenth century angle quoins of the Martin Tower in the Tower of London were found to be triangular on plan to save stone. Here the masonry had to be held up by a chain while work was in progress. The attacks of rabbits have necessitated extensive operations at Maiden Castle, a charming photograph of the inner vallum of which gives some idea of the scale of the work. Vegetation has also had its way. The insidious action of ivy disintegrates pointing, while on Holyhead Mountain the Hut Circles were being reduced to ruin by the roots of bracken and furze.

The best example of the anticipatory work of preservation is furnished by that at the Queen's Tower, Carnarvon Castle, the interior of which has been rendered safe from the corroding effects of weather by new roofs. These have been executed in heavy Quebec oak. The tie beam of the larger roof is 44 feet long and nearly 2 feet square, and weighs nearly four tons. The raising of it, within the narrow confines of the tower, must have been anxious work.

The elucidation of the arrangements of the various buildings and the rendering of the monuments more accessible to the public form an interesting record. Of the latter are further works at the Queen's Tower

consisting of the insertion of oak floors, the electrotyping of copies of the prisoners' inscriptions at the Tower of London for sale to the public, the opening out of Egin Cathedral to better view, and the uncovering of the buried stones at Stanton Drew. Many fresh facts have been ascertained about the monuments in the course of the year. The Old Bridge at Stirling has revealed the changes of gradient required by the increasing demand for facilitating traffic. Among other discoveries at Kirby Muxloe was the finding of four of the supports for the drawbridge. The clearance of the vaulted basement at Dunfermline Palace, necessitated by the pressure of the rain-sodden earth on the west wall, has shown the old vaulting arrangements and subsequent changes. At Dundrennan Abbey the grave-slabs of four abbots and probably a portion of a fifth have been found below the pavement.

Of the twenty-two monuments taken over during the year Scotland contributes more than twice the number of England and Wales together. Probably the two most interesting to architects are Framlingham Castle and Jedburgh Abbey. In spite of its vicissitudes on the Border the remains of the fabric of the abbey are very considerable, the various fires having destroyed the roof and fittings without doing very much damage to the stonework. The frontispiece and two other photographs illustrate Framlingham, the ruins of a once frowning fortress sheltering a "home of ancient peace." Among the other monuments are Culross, Crossraguel and Mathersey Abbeys, S. Botolph's Priory, Colchester, and Threave, Urquhart, Ruthven and Richborough Castles.

The technical Appendices consist of the General Instructions to Foremen and Reports on Stone Preservatives and the Use of Limes and Sands for Pointing; in addition there is a description of the work carried out for H.M. Office of Woods and Forests on the bridge and moat walls of Eltham Palace. The report on stone preservatives, which deals only with rough tests, comes to the conclusion that so far as our present knowledge goes there is no satisfactory and reasonably permanent preservative. The prevention of the decay of masonry is of vital importance, and the proposed scientific search (JOURNAL, R.I.B.A., 20th December 1913, p. 133) for a satisfactory preservative will begin none too soon. Of more interest is the report on limes and sands. This contains a tabulated *précis* of the actual experience of the foremen engaged on works where pointing is done by direct labour. The kinds of limes and sands used with their prices, the slaking of the limes, the methods of mixing, and the results are all given. It is proposed to carry out tests on the tensile strength of mortars with a view of amplifying those carried out by the R.I.B.A. Science Committee and to investigate the effects of the addition of grappiers and chalk to the lime. The whole appendix, dealing as it does with the subject from the point of view of practical working, furnishes an excellent supplement to Dibdin's "Strength of

L me Mortars." Mr. Forsyth, in his Paper on the "Repair of Ancient Buildings,"* suggested the evision of the Royal Institute's "Hints to Workmen." "The General Instructions to Foremen," the third appendix, should be a good basis from which to make such a revision. It forms a complete specification of all the usual labours necessary on works of reservation.

The Report is well illustrated with reproductions of photographs and of wash- and line-drawings. Considerations for the due display of the letterpress seem to have outweighed the orderly representation of the plans and sections of the Queen's Tower, Carnarvon Castle. No such considerations, however, required the printing of the plan of the south-west tower of Kirby Muxloe between its four charmingly drawn elevations. It is a pity that these drawings, and others, of which there must be many, are not published to a more adequate scale. The Editors of the *A.A. Sketch Book* would, no doubt, be only too willing to co-operate in their reproduction. The small scale to which the drawings have been reduced is shown in a marked degree in the plan of the stone circles of Stanton Drew. As the Ordnance map gives the plan to a larger scale, the only reason for reproducing the survey would be to show the recently uncovered stones. These, however, are shown on Mr. Dymond's plan, which is 50 feet to an inch.

It is hoped that the Report will meet with a ready sale as an inducement for reducing the price of it next year. The present price is out of all proportion with other official publications, such as those issued by the Patent Office, the Board of Agriculture, or by the Royal Commissions on Historic Monuments. To encourage public interest in what is being done for our national monuments a copy of this Report should be in the magazine room of every public library, in the same way as *The Illustrated Official Journal (Patents)* is at present.

W. J. DAVIES [A.].

Books Received.

- Mont Saint-Michel and Chartres. By Henry Adams. With Introduction by Ralph Adams Crann. 1s. 8s. Boston and New York. 1913. Price 25s. net. (Houghton Mifflin Company, The Riverside Press, Cambridge, U.S.A.)
- Francis Bacon: The Commemoration of his Tercentenary at Gray's Inn. So. Lond. 1914. Printed for private circulation by order of the Masters of the Bench.
- Carpentry and Joinery: A Text-book for Architects, Engineers, &c. By Banister F. Fletcher [F.] and H. Phillips Fletcher [F.]. Fourth edition, revised and enlarged. 8s. Lond. 1914. 6s. net. [Whittaker & Co., 2 White Hart Street, Paternoster Square.]
- Capitals of the Northlands: Tales of Ten Cities. By Inn C. Hannah, M.A. Illustrated by Edith Brand Hennah. So. Lond. [Heath, Cranton & Ouseley Limited, Fleet Lane, E.C.]
- A Short Account of Great Malvern Priory Church: By the Rev. Anthony Charles Doane, M.A. With 42 illustrations. So. Lond. 1914. 1s. 6d. net. [G. Bell & Sons, Limited, York House, Portugal Street, W.C.]
- The Cathedral Church of Glasgow: A Description of its Fabric and a Brief History of the Archi-episcopal See. [Bell's Cathedral Series.] By P. Macgregor Chalmers. So. Lond. 1914. 1s. 6d. net. [G. Bell & Sons, Limited.]

* JOURNAL R.I.B.A., 20th Dec. 1913, p. 109.



9 CONDUIT STREET, LONDON, W., 28 Mar. 1914.

CHRONICLE.

The Vote of Congratulation to the President.

THE PRESIDENT, before calling upon Mr. March Philipps for his Paper last Monday, referring to the vote passed at the previous meeting, said: I have to thank members for their very kindly thought at the last meeting, at which I was unable to be present, in voting their congratulations on the honour which has been conferred upon me by the Royal Academy. I need not say that I value that honour highly; but I value quite as highly the sympathy and appreciation of my colleagues, because I feel that without that sympathy and appreciation, if a man did not have some reason to hope that honours conferred upon him were also endorsed by his friends and colleagues, the honours would have very little value. Therefore such a vote as you were so good as to accord at the last meeting is of very great value to me, and an encouragement to discharge the duties which I have the honour to endeavour to do from this chair. There is also another point of view altogether—what may be called the public point of view. Such honours as these, conferred on any of our members—I am glad to say there was one the other night*—are a recognition of our colleagues, the painters and sculptors, of this art of architecture which we are endeavouring to practise. My own view is that our art deserves much more recognition than it has at present received, and I hope this may be an earnest of further honours and further promotions to come, because I believe—and I have studied our art critically a good many years—that we are steadily working onward; that the architecture of this generation is rather better than that of the last. We have more knowledge and more practical mastery of our art than our immediate predecessors. That, of course, has yet to be proved. Still, as a fairly dispassionate observer during the last twenty-five years, I may say I am inclined to think that that is the tendency of affairs. Our visitor to-night, I fear, does not agree with me, but you shall now hear him himself.

* Professor E. S. Prior, F.S.A. [F.], Slade Professor of Fine Arts at Cambridge, was elected Associate of the Royal Academy on the 20th inst.

Prizes and Studentships 1915.

The subjects of competition for the Prizes and Studentships in the gift of the Royal Institute for the year 1915 have now been arranged, and full particulars, together with the conditions of competition, will be found in the pamphlet now on sale at the offices of the Institute, price 3d. The following is a *précis* :—

THE ESSAY MEDAL AND TWENTY-FIVE GUINEAS, open to British subjects under the age of forty years, will be awarded for the best Essay on a subject of architectural interest, which may be chosen by each competitor for himself. Competitors are expected to make a useful contribution to knowledge by accurate research, so that the Essays can be accepted as authoritative statements on the subjects dealt with. Candidates in the Final Examination competing for this Prize may submit their Essay as the thesis required under Division (F) of the Programme [see KALENDAR, p. 430].

THE MEASURED DRAWINGS MEDAL AND TWENTY-FIVE GUINEAS, open to British subjects under the age of thirty years, will be awarded for the best Measured Drawings made by the competitor of any important building—Classical or Medieval—either in the United Kingdom or abroad. Candidates may apply to the Records Committee for guidance and direction as to subjects.

THE SOANE MEDALLION AND £100, open to British subjects under the age of thirty years, will be awarded for the best Design for a Bridge over a River, with covered Footways. The design is to include the laying-out of the approaches and the treatment of the space between the bridge and an important public building which closes the vista on the north side at a distance of 1,000 feet from the centre of the bridge. Provision must be made for embankment and roadways on both sides of the river. The winner of the Medallion has to study abroad for at least six months, and must furnish satisfactory evidence of his studies in the form of measured drawings and sketches.

THE PUGIN STUDENTSHIP (SILVER MEDAL AND £40), open to members of the Profession (of all countries) between the ages of eighteen and twenty-five years, and intended for the study of the Medieval Architecture of Great Britain and Ireland, will be awarded to the competitor who submits the best selection of drawings and testimonials. Special value is attached to perspective sketches done on the spot of an explanatory rather than a pictorial nature, and to measured drawings. The winner of the Prize has to devote a tour of not less than eight weeks to the study of medieval architecture in the United Kingdom, and to furnish the Council with an illustrated paper descriptive of his tour, together with his measured drawings, sketches, &c.

THE GODWIN BURSARY (supplemented by the Wimperis Bequest): A SILVER MEDAL AND £65, intended for the study of Modern Architecture Abroad, and open to British subjects without limitation as to age, will be awarded for the best selection of practical working drawings (the competitor's own work), or other evidence of special practical knowledge, and testimonials. The winner is required to spend at least five weeks abroad in the investigation of modern planning and modes of construction, drainage, water supply, ventilation, and other sanitary arrangements, and must, before the 31st December 1915, deliver to the Council an illustrated descriptive

report of his researches. He may confine his inquiries and report to one building only if of sufficient importance.

THE OWEN JONES STUDENTSHIP (CERTIFICATE AND £100), founded for the encouragement of the study of architecture, more particularly in respect to Ornament and Coloured Decoration, and open to members of the profession under the age of thirty-five years.—Candidates must submit testimonials, with drawings, some of which must be from existing buildings and from other examples, exhibiting their acquaintance with colour decoration and with the leading subjects treated of in Owen Jones's *Grammar of Ornament*, together with an original architectural design treated in colour decoration. The winner has to devote a tour of at least six months' duration to the improvement and cultivation of his knowledge of the successful application of colour as a means of architectural expression, and during his tour must prepare a drawing of a subject in coloured decoration for presentation to the Institute, the subject to be specified beforehand by the Council from the itinerary of his tour; if a particular subject be not prescribed, the Council reserve to themselves the right to select any drawing from among the studies made during his tour.

THE TITE PRIZE (CERTIFICATE AND £30), open to British subjects under the age of thirty years, will be awarded for the best Design for an Open Loggia, with Library over, in the Italian style, according to the methods of Palladio, Vignola, Wren, or Chambers. The Loggia is to be 150 feet long by 35 feet wide, open to a garden on the south, and with windows, &c., if desired, on the north side, which may be considered as surrounded with trees, but not near enough to exclude light. The winner is required to study in Italy for at least four weeks, and give satisfactory evidence of his studies there in the form of measured drawings and sketches.

THE HENRY JARVIS STUDENTSHIP, value £200 a year, tenable for two years at the new British School at Rome.—Candidates must be British subjects and under the age of thirty at the date of entry for the Final Competition, and must be either Associates or registered Students of the Royal Institute. The competitions for the Studentship will be held in conjunction with the competitions for the Scholarship (tenable for three years at the British School at Rome) offered by the Royal Commissioners for the Exhibition of 1851, and will be conducted under the direction of the Faculty of Architecture of the British School at Rome. Candidates must be prepared to go through two competitions, of which the Final will be held about three months after the First Competition. Candidates will be entitled to compete more than once in the First Competition until they have gained the Studentship or are debarred by the age limit. Three months will be allowed for the preparation of designs, reckoned from the date of the publication of the subject with conditions. From the candidates who have competed in the First Competition the Faculty of Architecture will select not more than ten candidates for the Final Competition. The subject for the Final Competition will be set by the Faculty of Architecture, and will be announced in the room on the opening of the first sitting of the Competitors. The Competition will begin at 10 A.M. on a Monday morning and continue till 1 P.M. on the Saturday of the second week following. Competitors will be required on the first day to make a sketch design, which will be covered with a sheet of tracing paper sealed down in the compartment by the Moderator at the end of the first day. In his

finished design the competitor will be required to adhere substantially to the sketch design. The candidate placed highest in the Final Competition will be awarded the Jarvis Studentship, unless being also qualified for the Commissioners' Scholarship he elects to take the latter, in which event the Jarvis Studentship will be awarded to the candidate placed next on the list. The Scholarship and the Studentship will not in any case be awarded to the same candidate.

THE GRISSELL PRIZE (GOLD MEDAL AND TEN GUINEAS), for the encouragement of the study of construction, and open to British subjects who have not been in practice more than ten years, will be awarded for the best Design for a Water Tower (to be constructed in any material) to hold 50,000 gallons, on high ground, to supply a town.

THE ARTHUR CATES PRIZE (FORTY GUINEAS), founded for the promotion of the study of Architecture, more especially in relation to the application of geometry to vaulting, stability of edifices, and design, is open to British subjects who have passed the Institute Final Examination at one sitting. Candidates must submit not less than two sheets comprising one of studies of subjects of Classical or Renaissance, and one also of Mediaeval Architecture, accurately drawn in perspective, and also not less than two sheets of detailed studies in relation to the application of geometry to vaulting and stability of edifice.

THE ASHPITEL PRIZE (BOOKS VALUE £10), awarded to the student who distinguishes himself most highly in the Final Examinations of the current year.

Sessional Papers of the 6th and 20th April.

The attention of members is drawn to a slight change in the programme of Sessional Meetings. The Paper by Mr. W. R. Davidge [A.], on "London's Bygone Building Acts and the Development of London," will be read on the 6th instead of the 20th April, and the Practice Committee's Paper will be read on the 20th. The subject of the latter Paper will be "Professional Practice," to be read by Mr. Max Clarke [F.], Vice-Chairman of the Practice Standing Committee.

Ancient Monuments Act: The English Advisory Board.

In pursuance of Section 15 (1) of the Ancient Monuments Consolidation and Amendment Act, 1913, the Commissioners of Works have constituted Advisory Boards for England, Scotland, and Wales. The members of the English Board are Mr. Lionel Earle, C.B., C.M.G. (chairman); Lord Burghelere (representing the Royal Commission on Historic Monuments in England); Lord Crawford (representing the Society of Antiquaries of London); Sir Aston Webb, K.C.V.O., C.B., R.A. (representing the Royal Academy of Arts); Mr. Reginald Blomfield, R.A. (representing the Royal Institute of British Architects); Sir C. Hercules Read, P.S.A. (representing the Trustees of the British Museum); Mr. C. P. Trevelyan, M.P. (representing the Board of Education); Professor F. J. Haverfield, V.P.S.A.; Professor W. R. Lethaby, F.S.A.; Mr. Reginald A. Smith, F.S.A.; Mr. C. R. Peers, F.S.A., Chief Inspector of Ancient Monuments.

Underground Improvements.

A Select Committee of the House of Commons presided over by Sir Luke White, have reported for third reading the London Electric Railway Bill, by which powers are sought for the construction of three new subways with moving stairways at Tottenham Court Road, a subway and a moving stairway at Piccadilly Circus, and another subway with a moving stairway at Trafalgar Square.

New ventilating devices are being installed on the Underground Railway on certain parts of the lines. Formerly the impure air in the tunnels was withdrawn by means of exhaust fans, but by the new method fresh air will be continually pumped into the tunnels. By this apparatus ordinary air is passed through a washing screen, which extracts all impurities, the proper degree of humidity is next attained, a proportion of ozone is added, and it is then sent into the stations at the rate of 25,000 cubic feet per minute. The apparatus is already working at Edgware Road, and it will soon be ready at Euston and at the new station at Charing Cross.

Delhi Buildings.

In the House of Commons last week Mr. Bennett-Goldney asked the Under-Secretary of State for India if he would ascertain whether the architect appointed by the Government to advise with a Committee as to the planning of the new Delhi has sent in a further report; whether his suggestions would be made public and his drawings exhibited in the House; and whether the designs for the principal Government buildings would be thrown open to competition to all architects who were British subjects, or whether the architect consulted with regard to the planning of the new Delhi was to be given the chief part of the work without competition.

Mr. G. Roberts replied that the Secretary of State was not aware that any important alteration in the planning of the new Delhi was proposed, but he would make inquiries on the matter. The two selected architects had been commissioned to prepare conjointly designs for Government House and two secretariat blocks, and there would be no competition with respect to these buildings.

Sheffield University Architectural Vacation Courses.

The programme of the Easter and Summer Vacation Courses, held in connection with the Department of Architecture at the University of Sheffield, is just issued. The object of these courses is the study of buildings of architectural importance by means of the making of sketches and measured drawings *in situ*. The courses are open to all students of architecture. Special advantages are that permission to sketch and measure a series of important buildings is obtained, all difficulties as to the use and hire of ladders, etc., are avoided, and an instructor is present with the student to give advice and guidance. Students make their own arrangements with regard

to rooms and board, but particulars of suitable accommodation are supplied to them.

The Easter Course will be held in York and District, commencing 11th April, and lasting for a week or ten days. Visits will be paid to Skelton, Castle Howard, Selby, Ripon, and Fountains Abbey. A lecture on the buildings of York, illustrated by lantern slides, will be given on 14th April by Mr. George Benson [A.], and the students attending are invited to meet the Council of the York and Yorkshire Architectural Society on the evening of 17th April.

For the Summer Course a tour in South France is being arranged, in conjunction with the Rev. Dr. West [A.], author of *Gothic Architecture in England and France*. The tour, beginning about the end of August, will last about twenty-four days. The route suggested is Paris, Clermont Ferrand, Issoire, Le Puy, Vienne, Orange, Avignon, Arles, Nîmes, Carcassonne, Toulouse, Albi, Rodez, Cahors, Périgueux, Rocamadour, Limoges, Paris.

Full information may be obtained from the Lecturer, Mr. W. S. Purchon [A.].

Moore Memorial at Shorncliffe.

As sufficient funds have now been collected to justify the committee of the memorial to Lieutenant-General Sir John Moore in setting the work in hand, they have entrusted the design of the library to Sir Aston Webb, R.A., and that of the statue to Mr. John Tweed. It is proposed to begin building the library at an early date, but as the sum available for the statue is at present insufficient the committee consider it necessary to invite further subscriptions in order that the memorial erected may be worthy of so great a soldier. Further contributions on this account are therefore urgently required, and the committee would be grateful for donations, no matter how small, to be forwarded at an early date to Messrs. Holt and Co., 3 Whitehall Place, S.W., or to the Secretary, Moore Memorial Fund, Shorncliffe, Kent. As the library is intended to serve as a memorial to the commanders and regiments of the Light Division as well as to those regiments with which Moore was closely associated, the Secretary to the Fund would be glad if any who are willing to contribute letters, prints, relics, arms, uniforms, &c., connected therewith would kindly communicate with him. He would be glad also to receive books, military or other, but suggests that he be first communicated with by those who are willing to present them.

Dr. Naville's Excavations at Abydos.

Dr. Edouard Naville [*Hon. Corr. M.*], in *The Times* of the 6th inst., gave some exceedingly interesting details of the excavations at Abydos which, with the help of Professor T. Whittemore (of Boston), Mr. J. E. Wainwright, and Mr. J. M. Gibson, he has carried out for the Egypt Exploration Fund. The excavations have yielded most interesting and unexpected results,

the distinguished explorer claiming to have discovered what the Greek authors call the Tomb of Osiris, where the head of the god was supposed to be preserved.

The work (says Dr. Naville) began two years ago, at a door which Professor Petrie had discovered, but where he had stopped. This door gave access to a long passage quite full of rubbish. In ancient times it had a ceiling formed of large sandstone blocks, but they have all been quarried out except one. The side walls are covered with texts of the Book of the Dead, of the time of Menephtah, the King of the Exodus. It slopes down gently, is about 14 metres long, and opens into what we thought then to be two side chambers. But they turned out to be a large hall, with a slanting ceiling and walls covered with funerary paintings of the same King. In front of the passage in the eastern wall of this hall is a doorway, the three huge lintels of which, 15 feet long, we had discovered two years ago. Behind it we thought we could trace two chambers, but we could not go farther for lack of means.

When we left the site we had between us and the Temple of Seti I., cleared many years ago by Mariette, a space of about 50 metres in length, covered with sand, not to speak of a huge mound of rubbish coming from Mariette's excavation. This was carried away by the Service des Antiquités last summer. Nevertheless, it was certain that we should have to go deep, and to cart away tons of rubbish. Therefore it was considered preferable not to work last year, so as to have the necessary means for working on a large scale when the clearing of the Osireion would again be attempted. The fact that we employ 639 men and boys, two-thirds of whom are boys, gives an idea of the size of the work, the largest ever attempted by the Egypt Exploration Fund. The Temple of Seti I. bears the character of what is called a Memnonium, a funerary building in connection with a tomb; and since it is dedicated to Osiris it shows that the tomb of the god must be somewhere in the neighbourhood. What seemed most probable was that the doorway discovered two years ago was the entrance to a passage leading to a subterranean chapel under the temple, such as is found at Deir el Bahari in the temple of the XIIIth Dynasty.

We should never have expected what we have found. Between the doorway and the temple is a complete sanctuary, evidently of the time of the Pyramids, very much ruined, but built with huge material, such as is probably not seen anywhere else in Egypt. It is a building quite unique among the numerous temples and tombs in the Nile Valley. It is rectangular; the enclosure wall is 12 feet thick, and consists of two different casings, the outer of rough limestone, the inner of large blocks of hard red sandstone very well joined, with granite dovetails. The length of the inside is 30 metres and the width 20. The enclosed space is divided into three naves parallel to the long side. The division is made by huge pillars of Assuan granite supporting architraves, also of granite, measuring generally 15 feet in length. The two side naves had ceilings made of granite monoliths, which cannot be called alaba, since their thickness is about 6 feet. The middle nave was probably open.

The effect of these two gigantic colonnades must have been most imposing. What remains of them is really very striking, though very little is left complete—only the corner of the northern colonnade. Ceilings, architraves, and pillars have been most wantonly destroyed. It is very probable that Ramesses II. was the first to begin the work of destruction, and that some of the blocks with which he adorned the sanctuary of his temple at a short distance came from the old building. But after him, perhaps in modern times, the havoc has been much greater. The majestic colonnades have been used as a quarry for making millstones of all sizes. Everywhere we see traces of the wedges with which the granite was split. We found several large millstones such as were used recently for wine or oil presses; they were nearly finished. We had to get them out of the way, but they weigh several tons; the removal of fragments even still larger delays a good deal the work of digging. We have not yet reached the pavement, but we are very near, and we shall then be able to

judge of the full effect of these gigantic constructions. In the outer wall of the two colonnades is a series of cells all alike, six of which have already been discovered, and of which there must have been no fewer than 16. They are not very large; a tall man can hardly stand in them. They were closed with wooden doors; the holes of the hinges are still to be seen. It seems probable that they are the images of what the Book of the Dead calls the cells in the celestial abode of Osiris. Otherwise there is absolutely nothing on the walls or pillars of the colonnades. This complete absence of signs is one of the characteristics of the buildings of the time of the Pyramids, as well as the style of the masonry and the use of colossal stones.

The middle nave leads to the end wall not very far from Seti's temple. It is in red sandstone, and there only we found sculptures with the name of Menephtah. They are decidedly funerary, such as the representation of the two principal amulets put near the deceased. It was clear that we were near a tomb. In fact, quite below is a small door not larger than those of the cells, which was closed by blocks of stone. When we had removed them we crept into a large hall very similar to that at the entrance, having the same width as the temple, 20 metres, and a length of about 35 metres. Its slanting roof is made of large blocks. This hall is in a perfect state of preservation. On one side, and part of the ceiling, are engraved or painted funerary scenes of the time of Seti I. It is quite empty. In a temple which has been a quarry for centuries we cannot hope to discover anything having any value. What shows that it was the burial place of Osiris are the texts on the walls, the end of the book which may be called the Book of the Underworld.

It is not impossible that we may still find some concealed chamber, or some hidden passage leading to a well, though this is not very probable. Undoubtedly in this extraordinary construction there are some features which correspond to Strabo's description of what he called the Fountain of Abydos, a building having a great similarity with the labyrinth, except that it was on a smaller scale. He says some of the most striking parts of the labyrinth were "the covered ways roofed with single stones of extraordinary size, pillars also of a single stone, and walls constructed of stones not inferior in size to those pillars." It is exactly what we see in our temple, and at present this is the only place in Egypt where such construction may be seen. It is not surprising that Osiris may have had such a huge tomb. When we see that the Kings did not hesitate to build the Pyramids in order to hide and safeguard their bodies, we may fancy that they would not do less for what they supposed to be the body, or part of the body, of one of their gods. Was it contained in a sarcophagus? Was it a head only, or a body? We probably shall never know.

Next winter the travellers going to Abydos will have to go behind the Temple of Seti, and they will be impressed by the sight of one of the oldest constructions in Egypt, slightly modified by the XIXth Dynasty, but certainly due to the most ancient rulers. They will admire the majestic simplicity of this monument, which was absolutely unknown until now. Its discovery shows that the soil of Egypt may still conceal large monuments hidden under a great depth of sand. It is the second time that the work of the Egypt Exploration Fund has revealed a building unique in its character and the existence of which was not suspected. A result such as that of this winter will, it is to be hoped, arouse the interest of the friends of antiquity. They will realise the importance of excavations of this kind which bring to light such wondrous remains of the past, and which are not a search for objects in order to fill museums and enrich private collections.

The late M. Vaudremer (*Hon. Corr. M.*)

At the General Meeting of the Institute, held on Monday, the 23rd March, Mr. E. Guy Dawber, *Hon. Secretary*, made the following announcement: "It is with great regret that I have to announce the

decease of Monsieur Joseph Auguste Emile Vaudremer, the eminent French architect, who for forty years had been connected with this Institute as Honorary Corresponding Member. M. Vaudremer, who was in his 86th year, was held in the greatest veneration by the profession in France for his architectural achievements and for his high personal qualities, and was very greatly esteemed and admired by the many architects of our own country who knew his work and had been brought into contact with him. M. Vaudremer was awarded the Grand Prix de Rome in 1854, and, besides the many important official appointments successively held by him, he was a member of the Institute of France and Commander of the Legion of Honour. I beg to move that the regrets of the Institute for the loss it has sustained by the death of its distinguished Corresponding Member be recorded in the Minutes, and that a message of sympathy and condolence be conveyed from the Institute to the architects of France through the Société Centrale des Architectes Français." The resolution was put from the Chair, and assented to in silence.

The Arterial Roads Conferences.

The London Arterial Roads Conferences organised by the Local Government Board were continued on the 16th, 17th, and 18th March. Mr. Raymond Unwin [*F.*] represented the Institute at the North District Conference, Mr. H. V. Lanchester [*F.*] at the South-West District, and Mr. W. R. Davidge [*A.*] at the South-East District.

THE EXAMINATIONS.

The Colonial Examinations qualifying for Candidature as Associate R.I.B.A.

The following candidates passed the Examination qualifying for candidature as Associate R.I.B.A., held in Toronto last December:—

FETHERSTONHAUGH: Harold Lea, 340 University Street, Montreal, Canada.

HEDLEY: George Ernest, 491 Manning Avenue, Toronto, Canada.

McDOUGALL: James Cecil, 85 Osborne Street, Montreal, Canada.

RHODES: Wilfrid Craven (Probationer 1905, Student 1907), 219 Beverley Street, Toronto, Canada.

SYMMONDS: William, 605 University Street, Montreal, Canada.

COMPETITIONS.

The Barnsley Town Hall Competition.

Members and Licentiates of the Royal Institute of British Architects are again warned that they must not take part in the above competition, because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

By Order of the Council,

IAN MACALISTER, *Secretary*.

STAINED GLASS.

By NOËL HEATON, B.Sc., F.C.S.

Lecture delivered at the Victoria and Albert Museum, 12th March 1914.

ANYONE who is impressed by the decorative qualities of stained glass—and surely those who fail to be moved by its ever-varying charm are beyond the reach of any æsthetic appeal at all—must be led to enquire how such a craft came into existence, and what is the secret of its production. The latter is revealed little by little as we study the development from generation to generation. As regards the former there is much that is obscure, but one thing at least is certain, and that is that the existence of a stained-glass window must have been preceded by the invention of window glass. As a matter of fact window glass had been used for centuries before stained glass was thought of; it is well known that sheet glass of a primitive type was introduced in the first century A.D., and was used extensively in this country during the Roman occupation. Great quantities were discovered during the excavations at Silchester, for example. In general this glass is nearly colourless, but less frequently we find examples of sheet glass strongly coloured; I have a fragment in my possession, for instance, which is of a strong and beautiful blue colour. Such coloured sheet glass cut up into small squares formed an admirable material for the execution of designs in mosaic—a method of decoration that was always extremely popular with the Romans—and with the rise of mosaic as a dominant method of mural decoration during Byzantine times we find such glass tesserae coming into extensive use. Whether the use of glass in this way actually suggested the introduction of stained glass, or whether, as some maintain, it had quite a different origin is a matter of controversy, resting mainly on hypothesis and conjecture, which I do not myself consider a profitable field of discussion. But it is at all events reasonable to suppose that the craftsmen of those days were intelligent; and being intelligent, and knowing what beautiful effects were produced by the play of light through transparent glass (as seen, for instance, in the wine flasks and vases which the glassmakers of that age excelled in producing), surely they must sooner or later have come to the conclusion that they were to a large extent wasting the beauty of their material by using it in this way. Whether a mosaic of coloured glass set in a window opening was the historical foundation of stained glass or not, however, there is no question that such a mosaic is in practice the basis or foundation of true stained-glass work.

It is quite probable that the earliest windows of all were of this type—just mosaic patterns—but there is

various evidence for believing that at least as early as the ninth century the art of the enameller was combined with that of the mosaic worker in the production of windows in which the mosaic pattern was converted into an intelligible design by painting on the surface of the glass with opaque vitreous enamel. Having got so far, the possibilities of the craft were quickly realised. We have to remember in this connection that the period of which I am speaking was an age of symbolism, and that the decoration of the church formed, as it were, the Bible of the people: a window of coloured glass, painted so that it told a story, was a splendid instrument for education—and the idea of pressing windows into the service of religious symbolism rapidly spread and provoked immense enthusiasm. The craft in consequence developed to such an extent that by about the middle of the eleventh century it was of sufficient importance to occupy a whole volume of the famous treatise of Theophilus—perhaps the earliest text book on record.

Theophilus here describes in detail the technical side of stained-glass work, and with a few alterations in details this description might form the basis of an encyclopedia article on the craft as practised to-day. There is practically nothing remaining of stained glass of the time of Theophilus, although one or two fragmentary windows exist which are attributed to the eleventh century. One of the earliest extant, for example, is that of Le Mans. There is a fine sketch of this window in the collection of drawings by Mr. Saint in the South Kensington Museum Library.*

The earliest examples in this country date from the twelfth century; there is a very fine fragment in Dorchester Abbey, for example, and a few fragments in York, such as that in the little church of St. Denis, Walmgate. The finest examples of the period extant in this country are, however, the magnificent remains of the windows which once filled the choir of Canterbury Cathedral; they are generally attributed to the thirteenth century, but I cannot help thinking myself that in character, if not in actual date, they are more typical of the end of the twelfth century. One point which distinguishes in most cases this early work from that of the present day is that the windows were considered as part of the church itself, the subjects of individual windows being arranged on some general

* This is reproduced in *Stained Glass of the Middle Ages in England and France* (A. & C. Black), in which these drawings form the illustrations to the account of stained glass given by Mr. Hugh Arnold.

plan carried out in a uniform method of treatment so that the whole series formed an entity, telling a connected story, and harmonising with each other and the building in which they were placed. In most cases this orderly treatment has vanished owing to subsequent disturbance, either accidental or deliberate, but it is still to be seen in such a church as Fairford. The usual plan was to arrange the windows to illustrate Bible history, but the windows round the choir of Canterbury are exceptional in their treatment: they originally formed a record of the miracles wrought at the Shrine of a Becket—they are, of course, an illustration of deliberate disturbance, all but three having been wantonly destroyed at the spoliation of the Shrine—but they teem with interest, and deserve far more attention than the very cursory glance usually devoted to them by visitors to the Cathedral. I must resist the fascination of tracing their history and elucidating their subject, and will merely allude to the main characteristics of their design from the purely technical point of view. These Canterbury windows, then, were rather unique in their treatment. In most cases windows were executed from what one might term stock designs obtained from contemporary manuscripts. A good illustration of this (although later than the period we are now speaking of) is seen in the windows of Mulhouse, which, as shown by M. Perdrizet, were copied from the *Biblia Pauperum*.*

One or two examples of the work of the thirteenth century, the earliest period of which any extensive remains are extant, will serve better than any description to convey an idea of their treatment and method of execution. In passing, let me mention two things—in the first place I am going to confine my examples deliberately to work to be seen in our own country, rather than attempt the impossible task of covering the whole ground; and in the second place I want to emphasise the fact that stained glass, especially early work, is essentially colour decoration, by showing reproductions in colour as far as possible, which is now rendered possible (although not easy) by colour photography.

Take, for instance, the Saint-Chapelle glass in the Victoria and Albert Museum (Fig. 1). If you consider this magnificent glass as a design in black and white you focus your attention on its weakest points and ignore entirely the main reason for its existence. But regard it as a design in colour and you obtain a totally different impression. Notice the simplicity of the whole thing; only five colours of glass are used, but they are skilfully balanced, and richness is produced by slight variations of thickness and texture in different parts. Then, again, the design is dominated by the essential feature of the craft, the necessity for joining the pieces of glass together into a mosaic by means of the lead. As regards the painting, notice the flatness, the absence of any attempt to



Fig. 1. Detail, Thirteenth Century: Victoria and Albert Museum

represent the third dimension—possibly this was mainly due to lack of skill, but I question whether it was entirely; at any rate, accidental or intentional, it is peculiarly fitted to such a material as window glass.

I can only pause to indicate another type of design altogether that is characteristic of early work, *viz.* grisaille work, which was executed mainly in white glass arranged in an elaborate mosaic of interlacing patterns outlined here and there by borders of colour, the whole painted with a simple design, without the introduction of any figures—a purely decorative treatment. Fig. 2 gives a good idea of the design of this grisaille work; a charming fragment of such work has



Fig. 2. Grisaille, Salisbury Cathedral.

* Paul Perdrizet, "L'Art Symbolique du Moyen Age à propos des Verrières de Saint-Etienne à Mulhouse," *Bulletin de la Société Industrielle de Mulhouse*, May 1907.

recently been discovered at Westminster Abbey and is now to be seen in the north transept. It is interesting to note the two methods of treatment side by side in those beautiful lancet windows in the Lady Chapel of Hereford Cathedral. But, of course, the finest example of grisaille work is the majestic window known as the "Five Sisters," in the north transept of York Minster.

It is impossible without the aid of a representative series of illustrations reproduced in their original

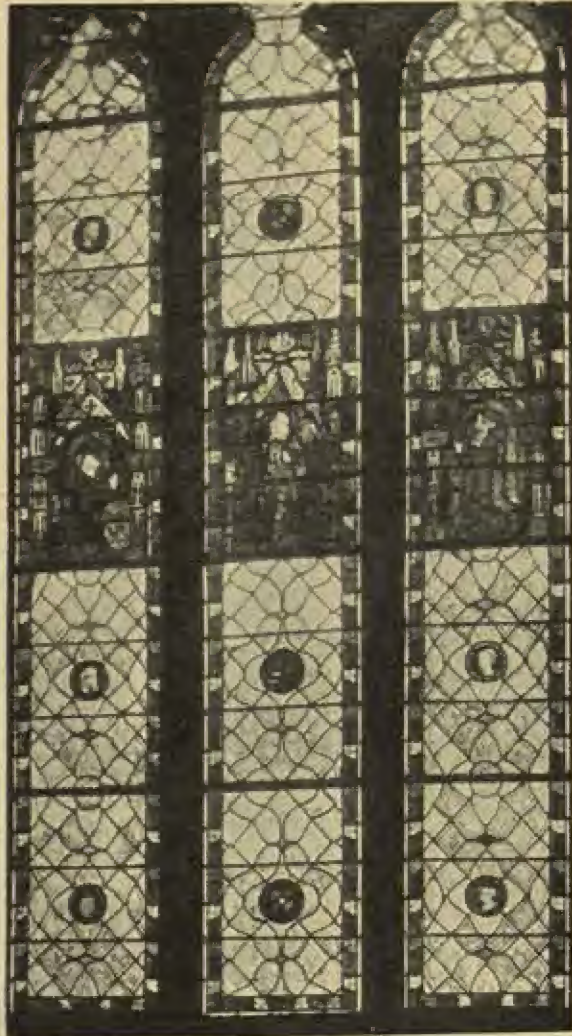


Fig. 3. Early Fourteenth Century: Merton College, Oxford.

colours to attempt in the space at my disposal any detailed description of the progress of design and execution in stained glass during the course of the fourteenth and fifteenth centuries, until the craft reached its highest development towards the dawn of the sixteenth century. Confining ourselves to the examples in our own country, we must examine in turn such treasures as remain, for instance, at Merton College, Oxford; Hereford; Tewkesbury; Gloucester; New College, Oxford; The Priory Church, Great Malvern, and, above all, the Minster and the numerous

parish churches of York, to realise the gradual transition that took place. Comparison of a typical example from each period (Figs. 3 to 7) will, however, indicate the main features of development. The windows of All Saints', North Street, York, always appeal to me as some of the finest examples of what it is possible to achieve in the way of beautiful design, given the consummate skill in execution possessed by the craftsmen of the fifteenth century at its best. Thanks to the courtesy of the Rev. P. J. Shaw, the Rector, I am able to enrich this article by reproductions of details of two of these windows.* Every time I examine these windows (and I never miss an opportunity of doing so) they impress me more and more with their "tranquil beauty," as Dickens puts it. I think also we are vastly indebted to Mr. Knowles, the veteran glass painter of York, for the skilful manner in which he executed the necessary repair of these windows many years ago.

The elaboration of design achieved by the craftsmen of the later fifteenth century is shown in a still more striking manner by the glass of Malvern Priory, details of which are shown in Figs. 6 and 7. This reaches its climax in the one fine example of mediæval glass to be seen in London—the magnificent east window of St. Margaret's, Westminster.

One cannot help feeling, however, that this elaboration marks a vicious tendency—the tendency to override the essential limitations of the craft. It was quite all right so long as the glass painters possessed the consummate skill in execution required to execute such intricate designs according to the traditions of their craft—so long as they maintained the mosaic of transparent coloured glass as the foundation of their design.

As an example of the difficulties thereby entailed I would refer to a shield to be seen in All Saints', York, an admirable reproduction of which, by Mr. Saint, is to be seen in the Victoria and Albert Museum (Fig. 8).



Fig. 8.

* The coloured plates accompanying this article are reprinted from *An Old York Church*, edited by the Rector. The plates are from drawings of the glass executed by Miss Mabel Leaf, and the original blocks have been kindly lent for the present publication.

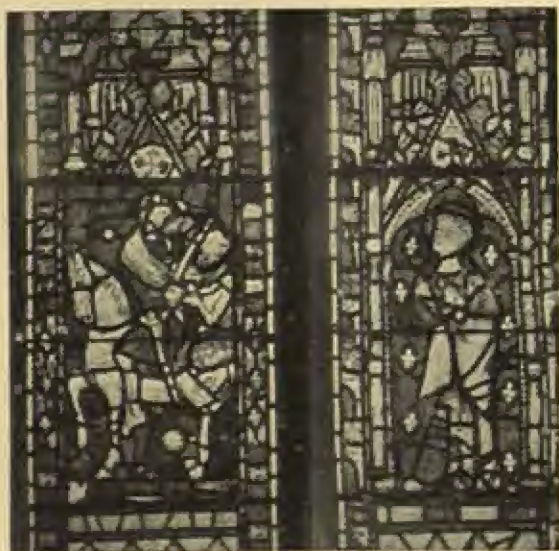


Fig. 4. Fourteenth Century: St. Martin, Micklegate, York.
(Detail of S.E. Window.)



Fig. 6. Late Fifteenth Century: St. Ann's Chapel, Malvern.



Fig. 5. Early Fifteenth Century: Gloucester Cathedral.
(Detail of Great East Window.)



Fig. 7. Early Sixteenth Century: Jesus Chapel, Malvern.



THE APPEARANCE OF OUR LORD TO A BISHOP SAYING MASS.
PART OF WEST LIGHT, WINDOW I.



THE SIXTH CORPORAL ACT OF MERCY: RELIEVING THOSE IN PRISON.
—PART OF EAST LIGHT, WINDOW IX.

The artist has not shirked the difficulty of representing golden fleurs-de-lys on a blue field, but has fairly faced and overcome the problem by laboriously cutting holes in his sheet of blue glass, staining the fleurs-de-lys on fragments of white glass and inserting these in the openings, securing them by a strip of lead.* Truly "there were giants in these days," but unfortunately their successors either lacked their skill or their training in the traditions of the craft, or were obsessed by the idea of producing an elaborate pictorial effect at all costs. A means of escape from their limitations was available in the use of transparent coloured enamels. Think how much easier it would be to execute the shield just examined by enamelling the blue ground on white glass, picking out the fleurs-de-lys in stain! But without going into an elaborate explanation of the technical and artistic reasons, I think everyone will agree that such facilities of execution were only obtained at the expense of those qualities which are the chief glory of stained glass—the "palpitation of light" that one gets when the sun streams through a mosaic of transparent coloured glass, with its delicate variation of thickness and texture. However carefully they are prepared, transparent enamels are in comparison lifeless and muddy: worse than that, they are of necessity prone to decay—they lose their brilliancy and transparency, and in many cases peel away bodily from the glass owing to difference of expansion, leaving unsightly gaps. But the use of such enamels came into vogue, and as we follow the craft through the sixteenth and seventeenth centuries we find them used at first sparingly, as for example in the window by William of Marseilles in the Museum, but more and more freely as glass painters who lacked the traditions of their predecessors succumbed to the snare of their facility. The result is an entire change of technique, as can be seen, for instance, in the seventeenth-century work of Van Ling—notably in the north-west aisle window of the nave of Christ Church, Oxford, where the use of coloured sheet glass is reduced to a minimum. One needs only to compare the effect of that window with the thirteenth- and fourteenth-century glass in the same church to realise all that this involved.

The final outcome is seen in the eighteenth century, the most familiar example being the west window of the ante-chapel at New College, Oxford, executed in 1777, by Jervais, from designs by Sir Joshua Reynolds (Fig. 9). By this time the idea of a design based on a mosaic of beautifully-coloured pieces of glass had been entirely abandoned owing to the difficulty of executing elaborate colouring, modelling, and perspective by such a process. The whole window is painted in enamel on squares of plain white glass. The use of enamel has gradually led, in fact, to the idea of escaping altogether from the structural necessities of the window and producing the illusion of a trans-

parent oil painting. But notice how futile is this idea—the window, after all, is of necessity a mosaic of square sheets of glass leaded together, because in those days it was not possible to produce a sheet of glass larger than about 24 inches by 18 inches, and the use of such squares simply draws attention to the limitations and defeats its own end. To-day it would be possible to execute such a picture on one huge sheet of plate glass—which would perhaps provide the illusion in this case of all the virtues personified sailing in at the open window, until some irreverent undergraduate with a catapult destroyed the whole illusion at one shot and brought the window



FIG. 9. Portion of West Window, New College, Oxford.

shattering to the ground in irretrievable ruin. As it is, these extremely virtuous ladies stand, as it were, behind prison bars, and they are, in fact, fading into a condition of shabby disrepair. Though they were designed by one of the greatest artists the world has produced, and though endless care and expense was lavished on their production,† they seem a sorry travesty of all they are intended to represent. Such being the result when a man like Sir Joshua Reynolds applied himself to the craft, what can one expect when lesser men worked on the same lines? For answer, I can only refer you to the church of St. Martin, in the Micklegate, York, where we see the work of Peckett inserted in the remains of a fourteenth-century window.

By the dawn of the nineteenth century stained

* Of course, the modern method of solving this problem would be to use a flashed blue glass and etch away the surface with hydrofluoric acid.

† Dallaway (*English Architecture*) states that the cost of the window was £2,000.

glass had become practically a lost art—windows were executed, but they were not stained glass as we understand it to-day and as it was produced in mediæval times. Of course, a good many causes contributed to this—for one thing art always seems to reflect the age that produces it, and we all know the characteristics of the early nineteenth century. Until Winston began to make his researches, and drew attention to the mosaic character of early glass, all the traditions of early work were hopelessly lost—the main idea seems to have been to produce a window that might cause a visitor to exclaim, "Is that really a window, how wonderful—it is exactly like a real picture." How far this really was the case is evident from the description of the art as then practised in the *Illustrated Exhibitor* for 1851. In the detailed description of the exhibits at the Great Exhibition these ideas are emphasised again and again; there is an elaborate description of an illustration the marvel of which is that it was all executed on a single piece of plate glass; whilst concerning a window by Mr. Baillie also illustrated (representing Shakespeare before Queen Elizabeth) it is observed that "the effect attained is equal, if not indeed superior, to oil painting."

But when the glasspainters tried to follow out the ideas of Winston and revived mosaic glass-painting, the result was if anything worse than before! Nothing can exceed the appalling results of early nineteenth-century work. Now why was this? First of all I think it was largely due to their firm conviction that bad drawing was the main characteristic of early work—they thought they had only to be primitive enough in their execution to secure the spirit of the early workers. I mention this because I have seen quite recently the same idea prevailing in designs for mural decoration; to my mind this is somewhat on a par with the man who argues that, because there are many cases known of genius which has risen superior to physical disability, therefore physical disability is a sign of genius. You have only to examine early work to realise that the craftsman told his story with all the skill of which he was possessed, and that his success is achieved in spite of and not because of his limitations as regards design; after all there is nothing like severe limitations for killing off the man of mediocre skill and limited enthusiasm and bringing to the front the man of genius.

But we must be fair, and acknowledge that the glasspainter of the early nineteenth century was hampered by many difficulties. For instance, in mediæval times glass was an article of luxury, and window glass especially was produced solely with an eye to its æsthetic qualities; glass as we know it to-day, a purely utilitarian product, a means to an end rather than an end in itself, was unknown, and impossible of attainment; their glass was absolutely useless for making lantern slides, or motor lamps, or any purpose for which one requires the glass to look through,

because of its inequalities of thickness, its imperfect transparency, but beautiful to look at because of these very "defects." When mosaic glasspainting was revived, glassmaking in the interval had become a science—glass was made to look through not to look at—all these qualities had been improved out of existence, and the only coloured glass obtainable was the crude, uniform, glaring tints which are so painfully familiar to us. This has now been remedied, and for many years glass has been available which compares in every way with the material used in ancient times.

But again we must be fair, and acknowledge that even with this improvement the modern craftsman is not on equal terms when his work is contrasted with ancient glass, which has undoubtedly gained immeasurably by the effect of time. But here we come to a point where the mediæval work was often at fault. Decay up to a certain extent undoubtedly increases the beauty of the glass, but when it proceeds to such an extent as to result in actual disintegration it cannot but be regarded as a serious defect. Mediæval glass was very unreliable in this respect, for reasons which are readily understood,* and it became worse and worse as time went on; the glass of Saint-Chapelle already referred to is merely covered with a surface patina; the glass of the great east window of York, 200 years later, is literally in places so fragile that you can put your finger through it. Such decay is the herald of restoration and all that that may imply. It is here that modern technology can be of immense service if allied to artistic perception. I venture to assert that there is no reason whatever why every square inch of the glass of a modern window, whilst possessing all those qualities which give mediæval glass its charm, should not be absolutely free from any tendency to excessive decay, so that after 500 years' exposure it remains sound and intact, its charm increased by that slight patina of the surface which, as Winston says, "is like the work of man perfected by the hand of God."

But the work of the early nineteenth century was sadly defective in another way—the enamel used in painting was so lacking in durability as at times to fade away almost before one's eyes.†

Let us again be fair and recognise the fact that this defect was far from unknown in mediæval times. Their enamel was very unreliable. In many cases, it is true, it was so durable that it acted as a protection to their unsound glass, and such specimens are pointed out to us as examples of how things were done in the good old days. But the many cases where the work has entirely perished are not there to point *their* moral. This, again, is a case for the application of science, and again I venture to assert that the cause of this

* I have discussed the reasons in detail in two papers to be found in the *Journal of the Royal Society of Arts*, 13th March 1907, and 18th March 1910.

† The causes of this are also discussed in the paper referred to above.

defect has been studied and overcome, and that there is every reason to believe that the best work of to-day will remain intact for the benefit of our remote descendants.

I think that the study of these early failures leads one inevitably to the conclusion that what is really necessary for the perfection of such a craft as stained glass is a combination of artistic ability and technical knowledge. Some years ago I expressed my conviction on this point as follows: "There must be two sets of workers—the artists, and those who work for them, but these two must work together to the same end if the best results are to be achieved; and to render this possible each must understand and appreciate the aims, the problems, and the difficulties of the other; there must, in fact, be co-operation between science and art. And I would say further that to my thinking the real function of technical education, as far as concerns such crafts, is to bring about this understanding—to teach the practical craftsman the fundamental principles on which his work is based, which he only learns by long and painful experience in his studio."^{*}

I can only say that the experience of every passing year strengthens and endorses that belief. The point is, are we in that position to-day? I must frankly admit that I have rarely seen a modern window that gave me perfect satisfaction; but whilst there is always room for improvement, I think we must acknowledge the immense progress that has been made in recent years. In this connection I would like to make it clear that I am far from wishing to suggest that stained glass should be merely imitative of mediæval work. A thorough knowledge of mediæval work is essential in order to understand the possibilities and limitations of the craft, to appreciate what can and what cannot be done with advantage in stained glass. But given the consummate skill in craftsmanship possessed by his predecessor of the fifteenth century, there is no reason why the modern artist should not use this together with the technical advantages he enjoys to express his own ideals and develop the craft to a point beyond that which it ever reached in mediæval times.

It is unfortunate that the modern artist suffers from a disadvantage which is quite beyond his control. I referred above to one great difference between ancient and modern windows; in mediæval times the stained glass was part of the church, the logical completion of the design, and though the subjects varied, the windows invariably told a connected story, and were designed in harmony with one another and with the building in which they were placed, or rather of which they formed a part. How many of us

must have gone into a modern church and wondered whether we really *were* in a church or in an exhibition; where each window competed with the next for your attention and all was chaos?

Of course we must frankly recognise that much of this is conditioned by the spirit of the age, and we must in fairness face the fact that it is in most cases not the artist who is responsible. We all have to live, and an artist has to live by his individuality. If a man executes a window that is unobtrusive and harmonises with its surroundings he earns the gratitude of all who love the craft; but if he succeeds in producing a window which will dominate the whole building he effects a magnificent advertisement which will secure him commissions for further work. So long as the present system prevails of regarding windows as isolated units independent of the building itself, so long must the artist be at the mercy of the donor.

It is curious that whilst I was thinking how best to put this view in the fewest words I came across an article in the *Church Times* for 30th January last which deals with it so much better than I could that I quote from it the following passage:—

That the great majority of our churches show in their windows a variety which is anything but charming is due to causes over which we have no control. . . . Only we can see that such mistakes are not repeated in new churches. . . . Every new church should have its scheme from the first, ready for the pious donor, who will more often than not fall in with such a scheme and admit its value, and whose gift should be refused if he will not. A scheme once framed and accepted should be modified only in detail, and every effort should be made to carry it out in harmony of treatment consonant with the harmony of its thought. So our churches, or those at least which are not already spoiled, may become again the Bibles of the poor, setting forth in orderly sequence the Divine plan of man's redemption. It is beyond question that the old haphazard glazing of our church windows with weird medleys of subjects and violent contrasts of treatment should now be brought to an end. If we are compelled to criticise those who have gone before us, we may at least learn in the process to protect ourselves against the criticism of those who shall come after us.

In conclusion, I suggest that we have every reason to view the future of stained glass with enthusiasm. We have to-day glass which combines technical soundness with æsthetic quality, which is beautiful in itself and may be relied upon to become more beautiful still in course of centuries. We have colour for painting which I venture to suggest is equally reliable. But above all we have a body of artists both imbued with a love of their craft and thoroughly alive to the technical necessities which I have described, men and women who may be trusted to carry on and develop its ancient traditions. One may reasonably hope that generations yet to come may treasure the best work of to-day, as we treasure the work of our predecessors of mediæval times.

^{*} *Journal of the Royal Society of Arts*, 18th March 1910, p. 467.

ALLIED SOCIETIES.

The Glasgow Institute of Architects.

At the Annual General Meeting of this Institute held on the 4th March, Mr. Alex. N. Paterson, A.R.S.A., addressing the members as retiring President, said they had every reason to be gratified with the record of the past year as showing a continued increase both in numbers and influence. As to the former, the session had again brought a marked increase in all sections of their membership. Year by year they were steadily approaching their ideal, that of including in their ranks every practising architect with the necessary qualifications. Very few indeed were there now in Glasgow who were not with them. In the wide area which constituted their Province under the territorial scheme of the Royal Institute of British Architects, they had already a very large number of members. There was still room for expansion, however, and the Council had already under consideration a means for bringing the claims and advantages of the Institute before the county practitioners. Where concerted action was desirable, as in so many instances it was, the importance of a united and general support was so obvious that no insistence on the fact was necessary, still less that success was most likely to be attained by all being comrades under the same banner. As regards their influence, they had had gratifying evidence during the past year that the benefit of their advice and assistance had been recognised where in former years it had not perhaps been so well appreciated. When speaking of influence they naturally thought more especially of Public Authorities, who were largely interested in building operations. With one or two exceptions they in Glasgow had not much to complain of as regards the employment by such authorities of unqualified—or self-qualified—officials in carrying out architectural works of importance; and where the work was thrown open to competition, it would seem that an approach to the Institute through the President or one of the members for guidance in drawing up the conditions and selecting or assisting to select the best design was steadily becoming recognised as the best course to pursue. And the best in this case did not mean solely or even mainly best in the interests of the architects, but rather as regards the artistic quality and the general efficiency of the result secured in the building erected. As he had said elsewhere, architects individually and as a class were a most altruistic section of the community. They might be jealous of each other—though the mutual intercourse of members of the Institute went far to remove what was evil in that attitude—but they were much more jealous in regard to the high standard of their own work, and of architecture generally, and spent themselves in the endeavour to raise its standard beyond the demands of their clients, who, in most cases, were little aware of the amount of labour that had gone to the study and perfecting of the designs for their buildings. He ventured to think that it was on these lines—in making it clear to the public generally, by their conduct as individuals and in their corporate capacity, that their interest was in the advancement of their art, and the better service of the community through its means, rather than in self-seeking—it was on these lines that rested the best hope of their influence being extended and consolidated. That once attained, the individual benefit would most surely follow. The advice they had proffered to the Corporation of Glasgow in the matter of the Municipal Buildings Extension had been accepted, and again in the case of Cathedral Square. Was it too much to hope that the appeal recently addressed to it in connection with the thorny subject of Cross River Traffic would also be listened to? As this was the last occasion on which he should occupy the Chair he would close with a word regarding one or two ideals unrealized. First, as to student members. There were, he supposed, about 150 pupils in the School of Architecture. Some of these were already on their list as Associates, but he would like to see every one of them both students of their school and student members of their Institute. That, he hoped, might be accomplished during the coming session as the result of the further deliberations of the Committee which had the matter in hand, to the benefit of both parties, and

without requiring any financial sacrifice from their not too highly remunerated juniors. Next, as to their rooms. They were admirably housed in many respects, but a centre which would afford more opportunity for social intercourse among their members would be a great advantage if it could be managed without straining their limited means. Even without that, something might be done to make their present room of greater interest and to give it more character as the centre of architectural thought of the City. The room might be hung with portraits of distinguished members and past presidents, and with drawings and photographs of notable work by members past and present. Memorial tablets might be placed on important buildings setting forth the names of their architects, with a limit as regards age of erection of say fifty years, which would at once rouse the interest of the public and contribute the fittest commemoration of those earlier brethren of whose contributions to the City's amenity and welfare by their works they, their successors, had reason to be proud, while forming for them a stimulus in the hope that some day a building of their own might be similarly honoured by those who follow after them in the Institute. These and other means and agencies by which the Institute might still further pursue the aim so admirably set forth in its Charter he left with confidence for the consideration of his successor in office with the assistance of the Council and the co-operation of the members at large.

MINUTES. X.

At the Tenth General Meeting (Ordinary) of the Session 1913-14, held Monday, 23rd March 1914, at 8 p.m.—Present: Mr. Reginald Blomfield, R.A., *President*, in the Chair, 47 Fellows (including 14 members of the Council), 52 Associates (including 1 member of the Council), 5 Licentiates, and numerous visitors—the Minutes of the Meeting held 9th March, having been published in the JOURNAL, were taken as read and signed as correct.

The Hon. Secretary announced the decease of Joseph Auguste Emile Vaudremer, Member of the Institute of France, Commander of the Legion of Honour, *Hon. Corresponding Member*, and it was resolved that the regrets of the Institute for the loss it had sustained by the death of its distinguished Corresponding Member be entered on the Minutes of the Meeting, and that a message of the Institute's sympathy and condolence be conveyed to the architects of France through the Société Centrale des Architectes Français.

The death having been also announced of Arnold Thorne, *Fellow*, Past President of the Devon and Exeter Architectural Society, who had served on the Institute Council as representative of that body, a vote of sympathy and condolence was passed to the relatives of the late member.

The following gentlemen attending for the first time since their election were formally admitted by the President—*viz.*, Ernest Tatham Richmond, *Fellow*; John Oliver Brook Hitch, Henry Victor Godfrey, Charles Dearman Hawley, Robert Albert Walter, *Associates*; Thomas R. Bridson, *Licentiate*.

On the motion of Mr. George Hubbard, F.S.A., *Vice-President*, seconded by Mr. Sydney Perks, F.S.A. [F.], it was

RESOLVED, that this Meeting hereby confirms the Resolution passed at the Special General Meeting held on the 9th March—*viz.*, "That under the provisions of By-laws 65, 66, and 67, subject to the approval of the Lords of His Majesty's Privy Council, By-law 28 be suspended from the 31st March 1914, to the 30th June 1915."

The President expressed his grateful acknowledgments to members for the vote of congratulation passed to him on his election as Royal Academician.

Mr. Lisle March Philipps having read a Paper entitled *BORROWING IN ARCHITECTURE*, and illustrated it with lantern slides, a discussion ensued, and on the motion of Professor W. R. Lethaby [F.], seconded by Mr. E. B. Havell, a vote of thanks was passed to him by acclamation.

The proceedings closed at 10.30 p.m.



Temple Bar and Fleet Street, 1756.

THE DEVELOPMENT OF LONDON AND THE LONDON BUILDING ACTS.

By W. R. DAVIDGE [A.], Assoc. M. Inst. C. E.

Read before the Royal Institute of British Architects, Monday, 6th April 1914.

THE growth of London and the growth of its Building Acts are so intertwined and interdependent that it is somewhat curious that so little research has been made into the origins of those laws and regulations which have had such an important bearing in the forming of Modern London. We look at an old building which has weathered the centuries with a sympathetic interest, and we strive to piece together its history, bit by bit, from the features, one by one, that we can put a date on. Here a door has been inserted, here a window or arch or arcading of later date, until the finished fabric affords to the seeing eye an open book wherein one may read of the labours and thoughts of the bygone centuries. Has it ever occurred to us to analyse in the same way the structure of the enactments on which London has been framed? Sometimes one hears suggestions as to the inconsistency of various sections and regulations. It may be so. Is it any wonder, when we consider that perhaps one section, in its essence at least, has stood the test of seven hundred years of argument between the building owner and his neighbour, another perhaps is reminiscent of the days when the only fire protection was the parish "squirt," and yet another comes white-hot from the neo-modern theories of the structural engineer? The marvel is that the finished edifice stands so well and looks so shapely, on the whole, despite the heterogeneous origin of its material parts.

A very brief sketch of the origins of London may serve to remind us of the various stages in the growth of this wonderful city of ours.

ROMAN AND MEDIEVAL LONDON.

The site of the first Roman City and the lines of its general lay-out have undoubtedly greatly influenced the development of London through the ages. Of that old city much has been written and still more conjectured, but of the many things we may know with certainty, one is undoubtedly that



Baynard's
Castle.

Guildhall.
Bow Church (Roman Temple).
Queenhithe.

Mansion House.
Dowgate.

Gresham College (Roman Pavement).
Leadenhall.
Old London Bridge. Billingsgate.

Ogilby's Map, 1677, SHOWING TRACES OF RECTANGULAR ROMAN STREET PLAN.

NOTE.—King Street and Queen Street, leading to the Guildhall, were made after the Fire of 1666.

he Roman building laws were enforced in Londinium Augusta as elsewhere in the empire, and some of these, too, may even have had their influence in shaping or modifying later ideals. The streets within the comparatively restricted area of the first settlement were apparently laid out in the regular rectangular fashion, and there is no reason to doubt that the general rectangular arrangement of the walls and streets was extended considerably during the 400 years of the Roman occupation, though

it is probable that there was a considerable amount of open space within the outer enclosing walls, in addition to the areas of reserved land outside the walls belonging to the city and kept for defensive purposes.

Professor Haverfield has contributed some very valuable information for students of the Roman town plan. He himself thinks that in London no street to-day follows the course of any Roman street. Before, however, accepting this conclusion in its entirety let us consider one or two general principles which he lays down as almost universal in Roman colonial cities.

The town areas are divided by two main streets (north and south, east and west), into four parts, and by other and parallel streets into square or oblong house blocks (*insulae*), and the rectangular scheme is carried through with some geometrical precision.

The *insulae* are fairly uniform in size, but those on the north side of the east and west street are often larger than the rest. In most towns, though not in all, the dimensions of the *insulae* show a common element. In length or in breadth, or in both, they approximate to 120 feet or some multiple of that. The unit of Roman land surveying, the "*iugerum*," was a rectangular space of 120 by 240 Roman feet—in English feet a trifle less. The general practice in this respect seems clear and is found elsewhere in Britain (at Silchester).*

Ogilby's map of 1677 shows us London as it was before any of the street improvements of modern times, and thus forms a useful basis for testing these conclusions—taking as our starting points on this map first the known line of the outer Roman wall; then Wren's clear statement of the existence of the Roman causeway, 18 feet deep, at Bow Church, Cheapside, exactly beneath the tower; then the finding in 1786 in Birchin Lane, 14 feet deep, of a rough chalk pavement coinciding with the line of this same east and west road.

Exactly half-way along this axis line is the existing Mansion House, where formerly was the "Stocks Market," for centuries the traditional centre of the Roman city.

Approximately equidistant on each side of this central point we have westward the Roman Temple recorded by Wren on the site of Bow Church, and eastward the Basilica near Leadenhall recorded by Sir William Tite and others.

A line north and south from the Stocks Market follows as nearly as possible the line of Walbrook, terminating at Dowgate on the river bank.

Taking the eastern boundary of the first Roman city as Billingsgate, we have old London Bridge immediately south of the Leadenhall Basilica, then Dowgate on our central axis. The port of Queen Hithe immediately south of Bow Church with its earlier Roman Temple, and the site of Baynard's Castle (a traditional Roman stronghold), is again equidistant from our axis line. It is curious, too, that the Guildhall, another old site at one time extending to Aldermanbury, is in a central position on the same axis as Queen Hithe and Bow Church.

Turning now to the particulars given by Professor Haverfield, we find that the east and west line, which represents almost the actual line of Cheapside continued in a straight line east and west, is exactly half-way between London Wall and the River, and all three almost exactly parallel. The original line of Cannon Street is again parallel and almost exactly half the distance between Cheapside and the River. Nearly all the subsidiary streets will be seen to be roughly at right angles to these lines.

Finally, the dimensions of the *insulae* forming the rectangular blocks will be found to agree almost exactly with those laid down by Professor Haverfield.

Let no one say that modern London is not a lineal descendant, at any rate, of the ancient *Londinium Augusta*. That the Roman city was a very complete and highly advanced community cannot be doubted, and it is difficult to believe that its traces could have disappeared in the short period intervening between the gradual withdrawal of Roman troops and the firm seating of Saxon power. Much more probable is it that the citadel or earlier city was fully maintained during this period, and that tracks like *Walling Street*, or, in Stow's spelling, *Watheling Street*, were formed across the lines of the outer city to afford easy access to the citadel. The building materials

* Professor Haverfield, *Ancient Town Planning*, pp. 77, 79, 142.

alone must have formed a valuable quarry for a generation or two in search of stone or tile wherewith to complete or repair the defences of the city. To this necessity for defence may be due the fact that the line of the Roman Wall is everywhere clearly traceable, though the exact line of the streets must still be the field for further research.

EARLY ATTEMPTS AT FIRE PREVENTION.

For seven centuries London building was at a standstill, but with the election of her first Lord Mayor, in 1189, the second chapter of London's building history begins. Like many another authority since, FitzAlwyne, the new Mayor, saw the need for regulating the buildings which no doubt began to spring up in considerable numbers on the establishment of more settled conditions after the Conquest. The London Assize of 1189, the first year of Richard I., although it dates back before the formation of our Parliamentary system, had all the force of a modern Act of Parliament, and in its details it affords a most valuable insight into the conditions of the times. Stow tells us that it remained in force for upwards of 200 years. The pity of it is that, although the Act remains, the buildings have long since disappeared. We may well wonder whether the existing Building Acts will ever survive as the only record of our present-day buildings.

FitzStephen's attractive account of London, written about thirty years before this, records that "The only pests of London are the immoderate drinking of fools and the frequency of fires."

FitzAlwyne's Assize of 1189, although aimed against the spread of fire, was not intended to be compulsory but rather permissive in character, and to facilitate the erection of stone party walls to separate premises belonging to different owners, and "especially for appeasing contentions which sometimes arise among neighbours." Up to this date the greater part of the city had been built of wood, roofed with straw, reeds, and similar materials, and the great fire in the first year of King Stephen (1136), which destroyed practically the whole city, was still in painful remembrance. It appears from the opening statements that after this widespread fire the more wealthy citizens rebuilt their houses with stone party walls and covered the roofs with thick tiles, but that wood and thatch were still in general use.

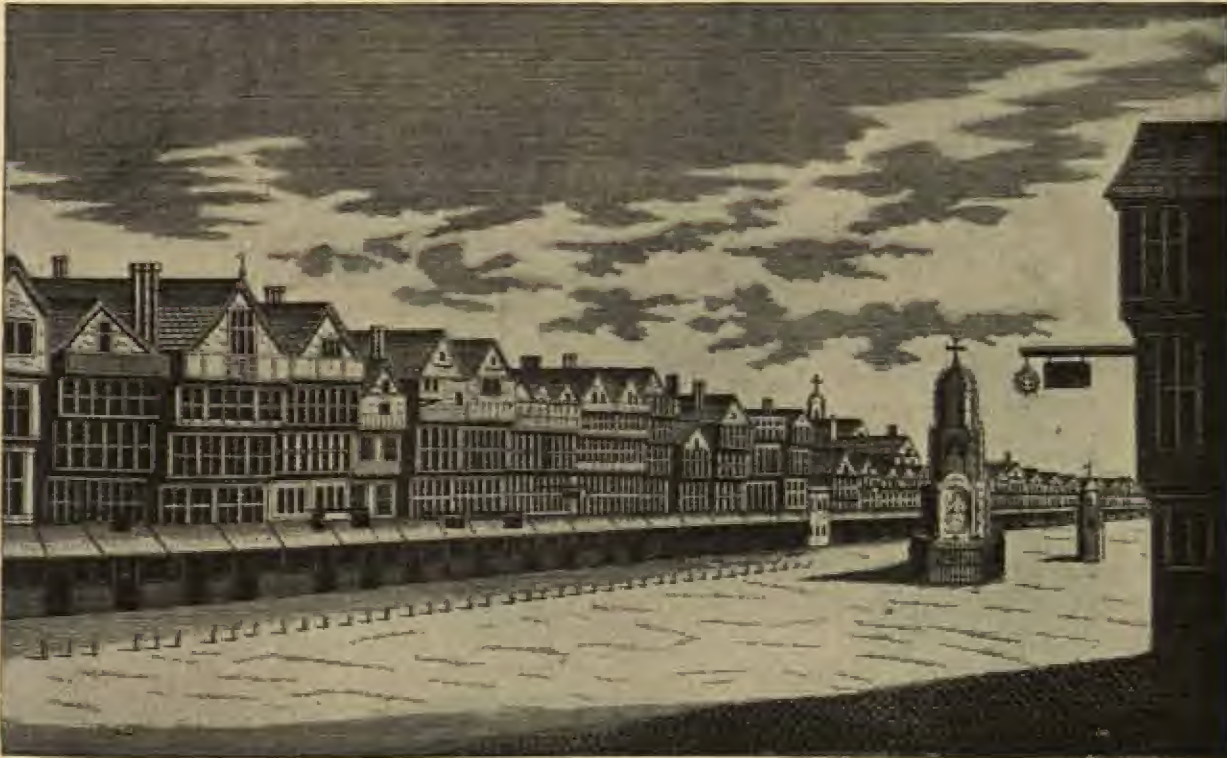
When two neighbours agreed to build between themselves a stone party wall, each had to give a foot and a half of land, and a wall 3 feet thick and 16 feet high was built at their joint cost, and provision was also made for a party gutter. A right to raise the wall to a greater height was also stipulated provided the building owner paid the expense, but no pulling down or alteration was allowed without consent. It is somewhat remarkable that this height of 16 feet occurs in the present day Building Acts in connection with requirements as to open space, and is also a limit frequently imposed on projecting shops. The thickness of 3 feet was no doubt intended to provide an abutment for vaulting, and it is to be noted that recesses were allowed if they did not exceed one foot deep, thus leaving a minimum thickness of one foot. In case of the poverty of the adjoining owner, or obstinacy on his part as to sharing the expense, he was to give up 3 feet of land, and the other to pay the cost of the wall. A somewhat curious stipulation was that when a man built his own stone wall on his own boundary, his neighbour was called upon to provide the necessary gutter under the eaves to take off the water. Corbel stones in such a wall could not be removed or altered without consent. The sanitary accommodation or pit for the "necessary chamber" had to be 3½ feet from the neighbour's land, unless lined with stone, when it need only be 2½ feet distant.

It is evident that "ancient lights" did not worry architects seriously in those days, for it is expressly stipulated that "if any one have windows looking towards the land of a neighbour, and although he and his predecessors have been long possessed of the view of the said windows, nevertheless his neighbour may lawfully obstruct the view of those windows by building opposite to them on his own ground, unless he who hath the windows can show any writing whereby his neighbours may not obstruct the view of those windows."

The height of buildings seems to have been a matter of sentiment. Public feeling was outraged when anyone built higher than his neighbours, and we have on record the sad fate of at least two people who attempted to thus overlord the community. As the chronicler says :

" One Sir John Champneis, alderman and mayor, built in his house a high tower of brick, the first that was ever heard of in any private man's house to overlook his neighbours, and this delight of his eye was punished with blindness before his death.

" Another, Richard Wethell, merchant tailor, built a fair house with a high tower, the second in number and first of timber that ever I learnt to have been built to overlook neighbours in this city. This Richard, then a young man, became in a short time so tormented with gout in his joints of the



CHEAPSIDE AND THE CROSS.

From Memorials of Old London. (Bentrose, 1908.)

hands and legs, that he could neither feed himself nor go further than he was led, much less was he able to climb and take the pleasure of the height of his tower."

Modern methods of procedure and those of mediæval times do not greatly differ, for in the very next reign we find an Amendment Act or Further Ordinance to regulate London building (Ordinance of King John, 1212). This second series of regulations was to some extent "panic legislation," brought about in consequence of the serious fire of the 11th July 1212. All alehouses, except by special licence, were forbidden unless of stone. Bakehouses and brewhouses were not to use reeds or straw, but wood fuel. Cookshops, bakehouses, and other trade premises were to be whitewashed and plastered inside and out as a preventive from fire, and all superfluous woodwork removed. Even nowadays lime-whiting of timber is a common enough requirement.

No special mention is, however, made of chimneys or flues, which were not yet apparently in universal use. Curiously enough bricks are not mentioned, though there are many references in the early records to "tuyles."

A general admonition was given to whoever wished to build "to take care as he loveth himself and his goods, that he roof not with reed nor rush, but with tile only or shingle or boards or lead." All thatched houses were to be plastered over within eight days, under pain of being demolished. All wooden houses in Cheapside were to be pulled down or amended to the satisfaction of the Mayor and Sheriffs. Finally, although no special means of escape were stipulated, the Aldermen of each ward were to have "a proper hook or cord," and fire appliances were to be provided during the summer months in front of every house in the form of a tub, either of wood or stone, full of water.

REGULATIONS AS TO PROJECTIONS.

Still further regulations were made dealing with projections from buildings. All penthouses and "jettees" (a general name for projections) of houses were required to be at least 9 feet high, so that folks on horseback might ride beneath them. Irregular structures of this description were required to be removed or altered within forty days under a penalty of 40s. The amount of the penalty has not altered during the last 700 years! No stall was to project from the house to which it belonged more than $2\frac{1}{2}$ feet, a dimension which to the present day is retained to limit projecting cornices.

EARLY CITY EXTENSION AND TOWN PLANNING.

The days of Edward I. were great in building development. Not only were the city walls of London extended to include the monastery of Blackfriars (1282), but many new towns in all directions were planned and built under Edward's orders. The new town of Winchelsea dates from this period, and there are many mediæval towns in Guienne and Aquitaine founded by Edward I. Montpazier, the most regular of English towns in Aquitaine, is of this date, and at Labourne the streets were planned as wide as 30 feet (or five toises of 6 feet each). In 1298 Edward I. wrote from Bordeaux asking for four expert town planners to be sent out.

"The most clever and able and those who best know how to divide order and arrange a new town in the manner that will be most beneficial for us and for the merchants, and who shall be ready and willing to go for that purpose wherever we may send them."

These New Towns or Free Towns may still be recognised by the names of Ville-Neuve and Ville-Franche so frequently met with in Southern France (Parker, *Domestic Architecture in England*, Vol. ii. p. 157).

London continued to grow. On the south side of the river Southwark was granted to the City in 1327 by Edward III. on payment of £10 annually, and in the reign of Edward VI., on valuable consideration paid to the Crown, it was formed into a twenty-sixth ward, by the title of Bridge Ward Without (*Pennant*). Owing to the smoke nuisance in London and the suburbs the use of coal was prohibited in 1306. The city began to stretch out beyond its walls. The Forest of Middlesex and the Warren of Staines were disafforested in the second year of Henry III., since which time Stow says that the suburbs of London had "mightily increased with buildings."

EARLY LABOUR TROUBLES AND REGULATION OF WAGES OF WORKMEN.

Strikes and labour troubles are not altogether of recent creation. So long ago as the reign of Edward III. (1350) legislation was passed with the idea of keeping down wages, and the interesting Act of Henry VIII. concerning artificers and labourers was only one among a series of similar enactments (6 Henry VIII. cap. 3). The following extracts will show how the workmen fared in the days of the "much-married monarch":—

"No artificer nor labourer hereafter named shall take no more nor greater wages than as under . . . a freemason, master carpenter, roughmason, bricklayer, master tiler, plumber, glazier, carver or joiner:—

"From Easter to Michaelmas:—6d. by the day without meat and drink, or 4d. by the day with meat and drink.

"From Michaelmas to Easter:—5d. a day without meat and drink, or 3d. a day with meat and drink. . . . And furthermore, where divers artificers and labourers waste most part of the day and do not deserve their wages, sometimes in late coming to their work, early departing therefrom, long sitting at their breakfast, at their dinner and at their noonmeat, and long time at sleeping at afternoon, to the loss and hurt of such persons as they be retained with in service:

"It is therefore established, enacted, and ordained that every artificer and labourer be at work between the middle of March and the middle of September before 5 of the clock in the morning, and that he have but half an hour for his breakfast and an hour and half for his dinner at such time as he hath season for sleep to him appointed by the statute.

"And at such time appointed that he shall not sleep, then he is to have but an hour for his dinner and half an hour for his noonmeat, and that he depart not from his work (in summer) till between 7 and 8 of the clock in the evening . . . and (in winter) they be at their work in the springing of the day and depart not till night of the same day."

It will be seen that there was no need to attach to a contract a schedule of rates of wages and hours of work. The following paragraph, too, shows that the men in the building trade of those days occasionally combined for other objects than raising wages:—

"If any artificer or labourer retained in service with any person for building or reparation do assault or make or cause to be made any assembly to assault, harm, or hurt any person assigned to control and oversee them in their working—he or they so offending shall have imprisonment for a year without bail."

In spite of this, the London men seem to have found means to bring pressure to bear, for the next year the Act was altered for their benefit, and (by 7 Henry VIII. cap. 5, as to labourers and artificers within the City of London) we read that

"In consideration of the great charge of their house rent, their victual and also that they be chargeable to and with divers offices as Constables Skavenniship and other when it haps, and also with lot and scot, and with many other things in the said city used and accustomed which charges be more there than in any other place within this realm, be it enacted that from henceforth such artificers, &c., may take for their wages like wages as they did before the said Statute, the former Act notwithstanding (except outside the City of London or if engaged on the King's work)."

The laws as to wages were amended both by Queen Elizabeth (1562) and James I. (1604), the latter entrusting the decision of disputes respecting wages to justices, sheriffs, and mayors, whose jurisdiction was only finally abolished in 1813. All through the centuries the trades were keenly jealous of each other and of their own privileges, and we find such special Acts as that of 1603, which laid down that "no plasterer shall use the art of painting" (1 James I. cap. 20).

"Registrationists" may perhaps quote this as a useful precedent.

TUDOR ACTIVITIES.

After the Wars of the Roses were satisfactorily over the population continued to flow towards London, and throughout the Acts of Parliament from Henry VIII. onwards we find repeated attempts to get the people back to the country.



SHIP YARD, NEAR TEMPLE BAR.

Sewers Acts were passed to drain fen lands, Acts to repair and re-edify the various country towns (1514 and 1540), many of which "are now fallen down decayed and do lie desolate."

In London itself, however, this period was a very active one. *Paving Acts* were passed for the Strand (1532, previously paved by Richard II. and Henry VI.), Holborn and Southwark (1533), and many City streets (1540-2), including from Holborn westwards to St. Giles-in-the-Fields and Aldgate to Whitechapel Church.

Water had been laid on from Tyburn in 1238. An additional Water Act was now passed (35 Henry VIII. cap. 10) by which the Corporation was empowered to lay water from springs at Hampstead Heath, Marylebone, Hackney, Muswell Hill, and other places within five miles of the City, and later on additional water works were erected on London Bridge (1581) and also near Broken Wharf (1594). The great New River undertaking of Sir Hugh Myddelton, involving a canal 38 miles long, was completed still later, in 1613.

ATTEMPTS TO RESTRICT BUILDING.

In the early years of Elizabeth, however, the struggle to provide for the ever-increasing population was becoming an acute one. Doubtless the jerry-builder was doing his best to supply the need for small houses, and crowding as many houses as possible on to the acre, for in 1588 (31 Elizabeth, cap. 7) we find "an Acte against erectyng and mayntayninge of cottages, which are daily more and more increased in many parts of this Realme." By this Act an attempt was made to provide a limit, not for the number of buildings per acre, but for the number of acres per building. No cottage or building was to have less than four acres of ground (the penalty for infringement was £10 and 40s. for every month the offence continued), and no cottage was to be occupied by more than one family. This Act did not, however, refer to London or other large towns, and exception was made for coal-miners and similar workers.

It is curious to find even in Queen Elizabeth's time a general feeling of discontent and disparagement of their own times as compared with the "good old days." Listen to this, written a year or so before the Armada:—

"In times past, when our houses were built of willow, then had we oaken men; but now that our houses are come to be made of oak, our men are not only become willow, but a great many, through Persian delicacy crept in among us, altogether of straw." (W. Harrison, 1577.)

"Now have we many chimneys, and yet our tenderlings complain of rheums, catarrhs, and poses. The smoke in those days was both a sufficient hardening for the timber and a far better medicine."

The famous Act of Queen Elizabeth in 1592 (35 Elizabeth, cap. 6) forbidding any new building within three miles of the City of London is, of course, well known. Its opening words give a striking description of the overcrowded and insanitary state of London at a time when its outward appearance, as shown in Wyngaerde's map, was so attractive and picturesque.

The Act begins by referring to the evils from crowded buildings:—

"For the reformyng of the great Mischiefes and Inconveniencies that daylie grow and increase by reason of the pesterling of Houses with diverse Families, harboringe of Inmates and converting of great Houses into several Tenements or Dwellings and erectyng of New Buildings within the Cities of London and Westminster and other Places nere thereunto adjoining, whereby great Infection of Sicknes and dearth of Victuals and Fuel hath growen and ensued and many idle vagrant and wicked persons have harboured themselves there and divers remote places of the Realme have been disappointed of Workmen and dispeopled: Be it enacted by the authoritie of this present Parliament, That noe person or persons of what Estate Degree or Condition soever shall from henceforth make and erect any newe Building or Buildings House or Houses for habitation or dwelling within either of the said cities (of London and Westminster) or within three miles of any of the gates" (following the lines of a previous proclamation of 1580).

The effect was considerably spoilt, however, by limiting the Act to seven years, and by allowing an exemption for larger houses assessed at anything above £5 per annum.

The modern idea of the healthfulness of an open belt of country was evidently beginning to make itself felt, for we find a strong prohibition against any further enclosure or encroachment on the numerous commons and open land within three miles of the city, such open spaces having been for many years "heretofore used for training and mustering of soldiers, and for recreation, comfort, and health of the people."

Elizabeth's attempt to stop the growth of London was as futile as Canute's to stop the rolling waves, but she and her successor, James I., persevered in the idea of stopping all building *except on old foundations*, and proclamations on even more stringent lines were issued in 1602, in 1603, 1604, 1607, and in 1615, this last having no exemptions whatever. The general interests of trade, the desire to encourage only skilled artisans, the fears of fire, plague, and famine, and the rapid increase of prices in every direction, all contributed to this line of policy. The privilege of building on "old foundations" still exists in a somewhat modified form. It is interesting also to find an instance of "certified plans" of old buildings so long ago as 1618. Many buildings erected on new ground were ordered to be pulled down by Order in Council, but the State Papers record at least one instance of such order for demolition of houses being countermanded, *on the certificate of the churchwardens that they were built on old foundations*.

Stow's picture of London growing out in all directions shows us eastward a long "continued street or filthy straight passage, with alleys of small tenements or cottages, along by the River of Thames, almost to Ratcliffe, a good mile from the Tower." In what he had known as an old country lane leading to the Manor of Shadwell he records that "in place of elm trees there are many small tenements raised towards Ratcliffe, and the suburb of Ratcliffe itself had been also increased in building eastward, in place where he had known a large highway with fair elm trees on both the sides, and hath now taken hold of Lime Hurst, corruptly called Limehouse."

"Also without the bars both the sides of the street be pestered with cottages and alleys, even up to Whitechapel Church, and almost half a mile beyond it, into the common field; *all of which ought to be open and free for all men*." "This common field," he says, "from being the beauty of the city on that part, is so encroached upon by building of filthy cottages and with other encroachments (notwithstanding all proclamations and Acts of Parliament) that in some places it scarce remaineth a sufficient highway for the meeting of carriages and droves of cattle. Much less is there any fair pleasant or wholesome way for people to walk on foot, which is no small blemish to so famous a city, to have so unsavoury and unseemly an entrance thereto."

Northwards from Bishopsgate towards Shoreditch was "a continual building of small and base tenements," for the "most part lately erected."

St. John's Street was "replenished with buildings up to Clerkenwell, and many fair houses built about the Priory which serveth as a parish church of St. John, not only for near inhabitants, but for all up to Highgate, Muswell, &c."

In the Strand was "a continual new building of divers fair houses as far as St. Martin's Lane."

A proclamation of James I., in 1605, required all persons "to build their fore front and windows either of brick or stone as well for decency as by reason all great and well grown woods are much spent and wasted, so as timber for shipping waxed scarce."

Under the Commonwealth Parliament, in 1656, still another Act was passed with the express intention of preventing "the multiplicity of Buildings in and about the Suburbs of London and within 10 miles thereof." The method of stopping unnecessary buildings was to impose a fine of one year's rent for every new dwelling house, outhouse, or other building upon a new foundation unless it had at least four acres of ground.

The Act also laid down that all houses should be built of brick or stone and "straight up without butting or jetting out into the street." An Act of six years later, however (14 Charles II. cap. 2), tells us that various sanitary reforms and street widenings are necessary by reason of the multitudes of houses lately built and from stopping of sewers, &c.

GROWTH OF CONSTRUCTIONAL REQUIREMENTS: THE ACT FOR REBUILDING THE CITY.

Now we come to the direct ancestor of our modern Building Acts. *The Act for rebuilding the City of London* after the Great Fire of 1666 (18 & 19 Charles II., cap. 8) provided the first complete code of building regulations. Although, no doubt, in its inception, it had some of the vices of panic

legislation, the great city being described as "now lying buried in its own ruins," it is remarkable for its statesmanlike grasp of the situation. The Act early states that "building with brick is not only more comely and durable but also more safe against future perils of fire," and the outside walls of all buildings in and about the city were henceforth to be of brick or stone, one solitary exception only being allowed "for the rebuilding of the Waterworks called Mr. Thomas Morris his Waterhouse adjoining to London Bridge," which was permitted to be rebuilt in timber, for the purpose of supplying the south side of the city with water "as it for almost this hundred years hath done."

For the better regulation, uniformity, and *gracefulness* of all new buildings they were to be divided into four classes, working upwards in quality :

First and least sort : fronting by-lanes.

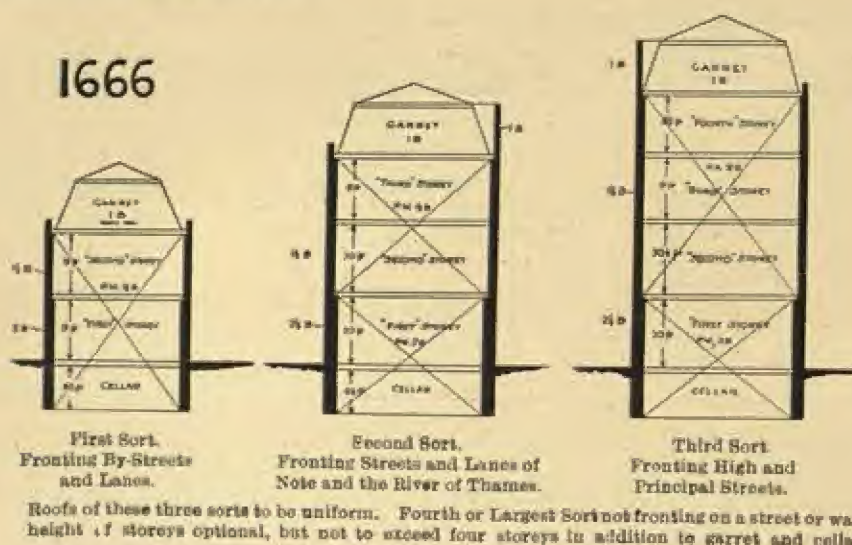
Second sort : fronting streets and lanes of note.

Third sort : fronting high and principal streets.

The roofs of all these classes were required to be uniform, and this restriction seems to have applied to all buildings, except the halls of the various companies and similar buildings.

Fourth and largest sort : Mansion houses for citizens or other persons of extraordinary quality not fronting either of the three former ways.

The object of the first three classes was to provide for varying thicknesses of wall and heights of storey, as shown on the diagram below.



In the fourth class, which consisted of mansion houses "of the greatest bigness" not fronting on any street, the number and height of storeys were left to the discretion of the builder, but not in any case to exceed four storeys (in addition to cellar and garret). The diagram may possibly even now be useful in identifying houses built under this Act immediately after the Great Fire. The scantlings of timber were also scheduled.

It is somewhat strange that sizes of timber are not now stipulated by the London Building Acts, though such a schedule is common enough outside the London area.

For the purpose of discovering and preventing irregular buildings, the Lord Mayor, Aldermen, and Common Council were empowered to appoint "one or more discreet and intelligent person or persons in the art of building to be the surveyors or supervisors to see the said rules and scantlings well and truly observed," and the surveyors or supervisors were "to take oath upon the Holy Evangelists for the true and impartial execution of their office" within their several precincts or districts.

The rebuilding of the city upon its ruins must have involved immense labour, and the streets had

first to be clearly marked and staked out. The penalty for interfering or moving the marks was three months' imprisonment, or a fine of £10, or if the offender happened to be a poor man "of low and mean condition" he was "to be openly whipped neere unto the place where the offence shall be committed till his body be bloody."

The setting out of the party walls equally on each owner's land appears to have been one of the first duties of the newly appointed surveyors. No fee was apparently provided for this, and the additional Act passed four years later (1670) prescribed a flat rate of 6s. 8d. in respect of each foundation; to make things fair all round, this was made retrospective, and no foundations were to be laid until the surveyor had viewed them. The adjoining owner was not permitted to build until he had paid one-half the cost of the party wall, with 6 per cent. interest. In case of dispute the matter was to be referred to the Alderman of the Ward as "Arbitrator."

The following "projections" were allowed in such streets as were declared by the Common Council as "high" streets:

"Balconies" 4 feet broad, with rails and bars of iron, of equal distance from the ground, not to exceed two-thirds of frontage.

Porches or penthouses of the same width were allowed in the remaining portion of the frontage if covered with lead, slate, or tile, and ceiled with plaster.

The water from both balcony and penthouse had to be conveyed into the channels by party pipes, and the pavements under such projections to be paved with flat stone.

One circular step was allowed outside the building, but the ground floor (then called the first floor) was not to be more than 18 inches or less than 6 inches above the street.

Stallboards of shop windows were allowed to project 11 inches into the street.

No house was allowed to extend beyond the ancient foundation, and the same limit applied to posts, seats, or similar projections; no cellar gratings were allowed beyond the front of the house.

It will be seen how very similar these stipulations are to section 73 of the 1894 Act.

Noisome and perilous trades might be prohibited in the principal streets, by order of the Lord Mayor.

Additional general constructional rules were as under:

In every foundation within the ground add one brick in thickness to be set off in three courses equally on both sides.

No timber within 12 inches of the front of the chimney jambs, and all joists at the back of any chimney to be trimmed 6 inches from the back.

No timber to be laid within the tunnel (flue) of any chimney upon penalty to the workman of 10s. (and 10s. every week it continues unreformed).

No joists or rafters to be more than 12 inches apart and no quarters at greater distance than 14 inches.

Span of all joists limited to 10 feet and of single rafters 9 feet.

All roofs, window frames and cellar floors to be made of oak.

Tile pins of oak.

No summers or girders to lie over the head of doors and windows.

No summer or girder to lie less than 10 inches into the wall, no joists than 8 inches and to be laid in "lome."

If any ground was left open and not built upon for three years, the Common Council had power to serve notice to build, and in default to sell the land on the owner's behalf.

The raising of prices of building materials by means of "rings" or combinations was evidently not unknown, for we find a provision enabling two Judges of the King's Bench to fix the prices of brick, tiles, and lime. A similar method was to be adopted in case of combinations or exactions by workmen.

All questions as to placing or stopping up ancient lights, watercourses, gutters, &c., were to be referred to the arbitration of the Alderman. Sewers, vaults, and paving of streets were to be dealt with by Commissioners, who were empowered to levy a special tax for the purpose.

The clauses of this Act dealing with street widening and improvement are instructive. The streets as a general rule were to be 24 feet wide,* and the Act of 1670 states that many builders

* 24 feet was the statutory width for Common Highways under the Act of 1662 (14 Charles II., cap. 6).

advanced their foundations further than formerly to secure regularity for the new streets. Payment was to be made for land taken, the price to be assessed by a jury. A "betterment" clause also existed giving power to charge the owners of houses improved by the opening out of streets.

In connection with these improvements Thames Street was to be raised 3 feet at least. The most important of all, though, was the reserving of a strip of open land 40 feet wide along the whole river front from the Tower to the Temple, possibly at the suggestion of Sir Christopher Wren, and a similar strip along the Fleet River, 70 feet from the middle of the stream (afterwards altered to a total width of not less than 100 feet and not more than 120 feet).

A duty on coals was also to be levied for the purpose of making wharfs and quays on the north side of the Thames and on each side of the Fleet River. The amount was, however, found insufficient and this duty was considerably increased by the succeeding Act.

The additional Act for the rebuilding of the City of London (1670) (22 Charles II. cap. 11) dealt first of all with further street improvements that had been found necessary in the four years during which the rebuilding of the city had been proceeding. Ground was to be assigned for markets and public buildings, such as the Royal Exchange, Guildhall, and Sessions House, enlarged and in some cases separated from other buildings in order to afford additional security.

A number of knotty legal points as to ownership and so on were to be settled by the decision of any three Judges, and differences as to party walls or charges of building were to be determined by the City Surveyors or any two of them (or, on appeal, by the Lord Mayor and Court of Aldermen). It was now made compulsory to carry off roof water by means of pipes. Storey posts were by this Act specifically left to the discretionary power of the surveyor, "such corner posts or storey posts to be of oak and of such dimensions and scantlings as the surveyors of the said City shall direct and appoint." The present powers of District Surveyors in this respect have therefore existed for nearly 250 years.

RIVERSIDE QUAYS AND SUBSEQUENT ENCROACHMENTS.

This additional Act (1670) confirmed the provision of a continued tract of ground 40 feet wide from London Bridge to the Temple for the purpose of the new quay, and, contrary to the usual impression, there can be no doubt that such a quay was actually provided and that it existed for nearly 150 years. This Act does not include the length from London Bridge to the Tower, which appears to have been already constructed.

Ogilby's map of 1677 shows the "New Key" as completed, and we can trace it successively in all the maps for the next hundred years or so. Horwood's map of 1799 shows the commencement of obstructions such as crane houses and sheds; the map of 1813 shows the encroachments growing still further; and by 1821, many brick buildings having been erected, it became necessary to whitewash the offenders, and, in spite of considerable opposition, a short Act was passed repealing in part the beneficent provisions of a century and a half earlier. Many causes, no doubt, contributed to the loss of these magnificent public quays, the introduction of docks lower down the river being not the least important. The original line of quays can still be traced by reference to the Ordnance map.

In the evidence given before a Select Committee of the House of Commons, appointed in 1833, on the necessity for public walks, &c., it is stated that gradual encroachments had been made on the rights of way once possessed by the public on both banks, particularly on an actual space on the north side of the Thames which was granted by Parliament and placed at the disposal of Sir Christopher Wren for the erection of a public walk. Gradual encroachments, first by cranes, then by sheds and counting-houses, had "at last got up into brick buildings and the citizens of London deprived of all that splendid intention." (Report of Select Committee 1833, p. 81). From a discussion at the R.I.B.A. in 1859 (Vol. IX., p. 90), it appears that the Act of 1821 had not disposed of the public right of way along the quays, which although encroached upon was still existing.



From Ogilby's Map of 1657, showing "New Quay" as completed.



From Horwood's Map of 1759, showing commencement of encroachment on Quay.



From Horwood's Map of 1813, showing further encroachments by crane houses, &c.
RIVERSIDE QUAYS AND SUBSEQUENT ENCROACHMENTS.

STREETS TO BE SWEEPED AND LIGHTED.

During the reign of William and Mary the condition of the streets received some attention, and everybody within the London area was required to have the street in front of his house swept twice a week (8 & 9 William III., cap. 37), under a penalty of 10s. Everybody in London and Westminster was also required to do his share of street lighting by hanging out a lantern.

QUEEN ANNE—1707-1708.

Fires still continued frequent, and further attempts at fire prevention were felt to be useless without proper appliances. In the reign of Queen Anne two Acts (6 Anne, cap. 58 [1707] and 7 Anne, cap. 17 [1708]) were passed, making it compulsory on each parish to provide two fire engines—viz., one



QUEEN ANNE'S GATE, S.W. (1705).

From Richardson and Gill's *London Houses from 1660 to 1820*. (Hatsford, 1911.)

large engine and also a hand engine, and the prompt attendance of the fire engines was secured by offering rewards of 30s., 20s., and 10s. for the first, second, and third parish engines to reach the scene of a fire, "provided they arrived complete and in good order."

Marks were now to be fixed on houses to indicate the position of stopcocks, and the key of the stopcock left at the nearest house, all these duties being undertaken by the churchwardens, who must have had no light task. As an encouragement to the watermen employed by the fire insurance offices, not more than thirty for each office were allowed freedom from impressment for the Navy and the Army. Any servant or similar employee whose carelessness or negligence caused a fire was liable to forfeit £100 to be distributed amongst the sufferers from the fire, "or eighteen months' hard labour in some workhouse," the owner or occupier no longer being liable.

Party walls were required by the Act of 1708 to be of the following thickness, somewhat simplifying the code previously in force:

2 bricks thick in cellar (half on each man's ground) ;

1½ bricks thick up to garret floor ;

1 brick thick in gable ends (under penalty of £50).

Party walls were to be carried up 18 inches above the roof. Front and rear parapets to be 2 feet 6 inches above the garret floor and coped with stone or brick (1707 Act). This is the first introduction of the idea of carrying the party wall above the roof, which has been one of the bugbears of architects ever since.

No "Mundillion or cornish of timber" or wood was in future to be allowed under the eaves.



NO. 60 CAREY STREET (1720)

From Richardson and Gill's *London Houses from 1660 to 1830*. (Batford, 1911.)

For the first time a right was given to the building owner to pull down and rebuild a party wall, charging the adjoining owner at the rate of £5 per rod.

Chimney jambs and chimney backs were to be 9 inches thick and widths 4½ inches, all flues parged and 9 inch gables rendered inside, hearths and chimney openings to be arched with brick.

No timber within 5 inches of flue.

No stoves, &c., to be within 9 inches of adjoining house.

No brick or stonework in future to rest on timber of any sort except the foundation planking usual in marshy ground.

Dangerous trades, such as turpentine distilling, were to be at least 50 feet away from any other building (the distance laid down in the present-day Act has therefore lasted over 200 years). An important point, too, is the setting back of all door frames and window frames in all houses, which were now for the first time to be set in reveals 4 inches deep—not for a protection from fire, but as a shelter from the weather. The common use of reveals, therefore, dates from 1st June 1709, and this, together

with the party wall above the roof and the absence of wooden modillions, should afford a very valuable clue to the date of the building. Unfortunately, however, instances of contravention of the Act are still to be found.

Under an Act of 1710 (9 Anne, cap. 17) fifty new churches were to be erected out of the proceeds of extra coal duties. The work of building St. Paul's was now nearing completion, and the Surveyor-General of St. Paul's (the great Sir Christopher) was by this Act to receive his "suspended salary." The authorities had apparently kept half of his salary back till he had finished the work.

GEORGIAN PERIOD.

We come now to the period of the early Georges. Discontent and dissatisfaction seem to have been felt by many with the previous Act of Queen Anne's reign, and an attempt was made to set things right. In 1724 a new Building Act (11 Geo. I., cap. 28) came in which introduced the necessity for notice to be given to the adjoining owner in cases where it was desired to rebuild a party wall in connection with any new building. Three months' notice, though, was required, not the modern compromise of two months, and brickwork was to be paid for at £5 per rod. No timber was to be allowed in party walls. Party-wall openings uniting buildings were only allowed so long as the premises were used as one house only, and provision was made for party pipes to take off water from roofs.

The Act goes on to show us what was wrong with the Act of Queen Anne. "A very great increase of buildings" had taken place and many of the houses so built were admittedly not in accordance with the Act. The owners and head builders were accordingly liable to the heavy statutory penalty of £50, but there was no means of making them put the work right. There was no help but to excuse them the penalty, provided they altered their buildings to comply with the Act.

WINDOW TAX.

Windows were first taxed in this country by 6 & 7 Wm. III., cap. 18 (1695). The duty was increased by 20 Geo. II., cap. 3 (1746), amended by 21 Geo. II., cap. 10 (1748), and further increased by the Tea Commutation Act, 24 Geo. III., Sess. 2, cap. 38 (1784). It was again raised by 37 Geo. III., cap. 105 (1797), by 42 Geo. III., cap. 34 (1802), by 48 Geo. III., cap. 55 (1808). It was reduced by 4 Geo. IV., cap. 11 (1823), and was repealed 14 & 15 Vict., cap. 36 (1851).

Typical examples of the Window Tax at different dates are given below :

In 1762.					In 1833.				
8 windows	...	...	...	£0 11 0	8 windows	...	...	...	£0 16 6
9 "	...	...	...	0 12 0	9 "	...	...	...	1 1 0
10 "	...	...	...	0 13 0	10 "	...	...	...	1 8 0
11 "	...	...	...	0 14 0	11 "	...	...	...	1 16 3
12 "	...	...	...	1 1 0	12 "	...	...	...	2 4 9
13 "	...	...	...	1 2 6	13 "	...	...	...	2 13 3
14 "	...	...	...	1 4 0	14 "	...	...	...	3 1 9
15 "	...	...	...	1 5 6	15 "	...	...	...	3 10 0
16 "	...	...	...	1 7 0	16 "	...	...	...	3 18 6
17 "	...	...	...	1 8 6	17 "	...	...	...	4 7 0
18 "	...	...	...	1 10 0	18 "	...	...	...	4 15 3
19 "	...	...	...	1 11 6	19 "	...	...	...	5 3 9

20 and upwards the same as before—viz., 1s. 6d. per window and 3s. the house.

All houses or cottages with 7 or less windows to pay 3s. the house. As many persons have, and will alter the number of their windows on account of the additional duty, it may not be improper for them to know that the Act of Parliament directs that no window or light will be deemed to be stopped up unless it be stopped with brick or stone or plaster upon lath, or with the same materials of which the outside of the house doth chiefly consist, and the Surveyors in their respective divisions have express orders from the Board of Taxes to charge all windows that are not stopped up according to the directions of the Act. (*Annual Register*, 1762, p. 70.)

TAX ON BRICKS.

Bricks were first taxed by 24 Geo. III., cap. 24 (1784), at the rate of 2s. 6d. per 1,000. This duty was several times increased, until by 2 & 3 Vict., cap. 24 (1839), it was fixed at 5s. 10d. per 1,000 for ordinary sized bricks, and 10s. for the larger size. It was repealed in 1850 (13 & 14 Vict., cap. 9).

LAWS AS TO BRICK AND TILE MAKING AND SIZE OF BRICKS.

In the time of Edward IV. (17 Ed. IV., cap. 4) directions were given for the proper making of plain tiles, roof tiles, and gutter tiles.

The Tilers and Bricklayers Company, incorporated in the reign of Queen Elizabeth, had been given power to supervise brick and tile making within 15 miles of the city of London, but in spite of this it was found necessary in 1725 (12 Geo. I., cap. 35) to again legislate on the subject :

"Notwithstanding the Act of Parliament, several persons, especially within the compass of 15 miles of the city of London, dig the clay and earth for making bricks at unseasonable times in the year, and continue to make bricks of bad stuff and unsizeable dimensions, and do not well burn the same, and in making thereof mix great quantities of soil called Spanish, and in burning thereof use small ashes and cynders commonly called breeze instead of coals, and burn the bricks commonly called grey stock bricks in clamps and the bricks commonly called place bricks in the same clamps, on the



BACK OF HOUSES, ALDGA TE HIGH STREET (FROM MANSELL STREET).

outside of the said grey stock bricks by means whereof great part of the bricks now usually made are so hollow and unsound that they will scarce bear their own weight, and whereas there is at present no provision made by any law for the dimensions of bricks to be made and used in buildings, or for the lengths, breadths, or thicknesses of pantiles, which are but a late invention in England . . . in future all place bricks to be not less than 9 inches by 4½ inches by 2½ inches. Stock bricks to be of same dimensions, but ½ inch thicker; pantiles not less than 13½ inches long, 9½ inches wide, and ½ inch thick."

In 1730 it was found necessary to forbid combinations of manufacturers to advance the price of these materials, and in 1769 the statutory size of bricks within 15 miles of London was reduced to 8½ inches by 4 inches by 2½ inches—another clue to the date in buildings of this period.

STREET SIGNS.

The Spectator of 2nd April 1710-11 (No. 28) has an interesting letter on the subject of street signs, in which the writer draws attention to the "daily absurdities hung out upon the signposts of this city." He goes on to say :

"Our streets are filled with blue boars, black swans, and red lions, not to mention flying pigs and hogs in armour, with many other creatures more extraordinary than any in the deserts of Africa. Then the way they are joined together in the same sign. The Fox and Goose may be supposed to have met, but when did the Lamb and Dolphin ever meet, except upon a signpost? It must, however, be observed that it is usual for a young tradesman to add to his own sign that of the master whom he served, and this seems to have given rise to many of these absurdities which are committed over our head."

Despite this ridicule, street signs held their own as a means of identifying premises well into the middle of the eighteenth century. A note in the *Annual Register*, dated 12th July 1765, reads:

"The new pavement from Charing Cross to Temple Bar was this day ended and the communication opened for carriages. Those who have not seen this new pavement can scarcely imagine the alteration made by it, the taking down of signs and fixing up of lights in a regular manner. It may be said that no street in London, paved, lighted, and filled with signs in the old way, ever made so agreeable an appearance, but the alteration in St. James Street greatly surpasses it."

Street Numbering was first introduced early in the eighteenth century; the first known instance



BANTON STREET, WESTMINSTER.

From Richardson and Gill's *London Houses from 1660 to 1860*. (Batsford, 1911.)

being in Prescott Street, Whitechapel, which is mentioned by Hatton in 1708 as having the houses distinguished by numbers instead of signs. One or two other streets were either partially or wholly numbered in the first half of that century, but this did not become popular until after the Act of 1762 (3 Geo. III., cap. 23), which required the removal from the streets in the West End of hanging signs, and for the fixing of them on the fronts of the houses to which they belonged. In 1765 (6 Geo. III., cap. 26) power was given to the Commissioners of Sewers in the City to regulate projecting signs, and the same Act also made provision for the names of streets to be put up and all houses numbered (within the City of London). Street lighting was undertaken by the Commissioners in 1767. Towards the end of the century the numbering of houses had become general, and many of the older streets, especially in the City and West End, still retain substantially the numbering then applied to them, the system of

"consecutive" numbering being used, as opposed to the "odd and even" principle of the present day. *Street Naming* was not apparently controlled until 1855, when the Metropolitan Board of Works was empowered to deal with the matter under the Metropolis Management Act. Not before it was needed, however, for in 1868 there were no fewer than 40 High Streets, 50 George Streets, and 65 Charles Streets within the area of London.

The following extracts from the *Annual Register* give interesting sidelights on the London of 150 years ago :

1760, p. 151.—“ A great many hogs were lately seized by the Churchwardens, overseers, and constables of the parish of St. George, Hanover Square, and sold for the benefit of the poor, agreeable to the 8th and 9th of William III., which makes all hogs forfeited that are bred, fed, or kept in the houses or backsides of the paved streets or within 50 yards of the same, where the houses are contiguous.”

1762, p. 90.—“ A remarkable cause came on in the Court of King's Bench upon indictments against an eminent builder and a master bricklayer employed by him, for a nuisance in leaving a heap of rubbish in the street last October, no watch or light being set up in order to prevent accidents ; the consequence of which was that a coach with some ladies and children in it was overturned, most of whom were greatly bruised but one of the ladies received her death. The builder alleged that he committed the care of removing this rubbish to the bricklayer, whose proper province it was to see it done ; and the bricklayer laid the blame on the carter. But the builder was considered as culpable, it being his business not only to take care to employ proper people under him, but also to see that they do their duty, and he was therefore fined £100, which he paid in Court ; and the bricklayer's sentence was twelve months' imprisonment in the King's Bench.”

The following catastrophes from fire and tempest are recorded as happening in an average six months :

1763, 6th May.—“ A most dreadful fire occurred at the house of Lady Molesworth in Upper Brook Street. 9 perished.”

31st May.—“ Some old houses in Bunhill Row fell down lately, by which accident several persons lost their lives. “ A little before 3 others fell down in White Friars, and a poor child accidentally going by to school was buried under the ruins.”

23rd June.—“ A fire broke out in Kings Street, Rotherhithe, which entirely consumed about 20 houses and several outhouses, besides damaging many other buildings.”

10th July.—“ About 1 o'clock in the morning a most dreadful fire broke out near New Crane Stairs, Shadwell, which in a few hours consumed 114 houses besides warehouses, etc., a dock, and a ship just finished therein. Several lives were lost on this occasion. But no less than £600 was soon after collected for the relief of the sufferers.”

2nd July.—“ A house in Queen Street, Lincoln Inn Fields, which had been lately repaired, and 2 in Gracechurch Street, which showed no signs of craziness, suddenly tumbled to the ground, without any other noise than a loud crack, which, however, was sufficient to alarm the inhabitants, so that no lives were lost.”

8th Sept.—“ A most dreadful fire broke out at Shadwell dock, which burnt 30 houses before it could be extinguished, among which was Stockers brewhouse and divers others of great value. Fifteen hundred pounds has since been collected for the unhappy sufferers by this fire. We cannot help observing on this occasion how many lives might be saved in case of sudden fire had every floor a front and a back door-window [i.e., casement window], as then those who could not get downstairs might much better come at ladders fixed to receive them, and throw out beds and jump out with a much greater certainty of falling upon them than can be done by means of mere windows.”

12th Nov.—“ The Blue Anchor, a public house near the King's Yard, Deptford, known by the name of the Red House, fell entirely to the ground ; there were several lodgers in it, two of whom were unfortunately killed ; divers were dug out of the ruins much bruised, and three children, who happily received no hurt.

“ Two days before two old houses and a new house fell down of themselves in London, but fortunately without doing any mischief.”

27th Dec.—“ The wind was so high that a house in St. Giles was blown down and a woman and two children killed.”

1764, p. 82.—“ A small piece of ground in Piccadilly, bought some years ago, when a field, for £30 by a brewer, as a waste place to put his butts in, was lately sold for the benefit of his son, an orphan, for the sum of £2,500, so greatly is that part of the town improved, even in the memory of man.”

Here is another typical six months :—

1765, p. 59. 19th Jan.—“ During a very crowded trial at the Guildhall, the floor gave way, but was providentially prevented from falling entirely down by some goods which were stowed in the cellar underneath it, so that no person received any other hurt than that of being greatly frightened.

“ The like happened some years ago at the Neapolitan Ambassador's Chapel, near Soho Square, when one side of the floor fell quite to the ground, though without the loss of any lives.

“ And had like to have happened since at a public meeting of the Society of Arts, etc., in the Strand (May, 1762).

“ We think it our duty to mention these facts, to caution people against meeting in great numbers in places not originally intended to bear very great weights, or not duly surveyed before the conversion of them to such uses.”

15th May.—“ A dreadful fire broke out in Narrow Street, Shadwell, which consumed upwards of 60 houses.”

31st May.—“ Five houses in Hat and Mitre Court in St. John's Street, Smithfield, lately fell ; and a few days after 2 houses fell down entirely to the ground, but no person was hurt, in George Alley, near Fleet Market.

“ We think it our duty to mention these accidents, in hopes of awakening the attention of those whose duty it is to remove such nuisances.”

1st June.—“ A dreadful fire broke out adjoining Rotherhithe Church, which in a few hours consumed 206 houses. Upwards of £3,000 was collected for the sufferers.”

13th June.—“ Fire in Talbot Inn, Surrey Street, Strand, burnt all the houses between it and Somerset House and Urry Street to Strand Lane.”

21st June—"Fire at Gun-Dock, Wapping, destroyed 30 dwelling houses."

31st July—"The rage, or at least hurry, of building is so great at present that the bricks are often brought to the brick-layers before they are cold enough to be handled, so that some days ago the floor of a cart loaded with bricks took fire in Golden Lane, Old Street, and was consumed before the bricks could be unloaded."

25th Aug.—"Fire at Ratcliff Cross, 30 houses, and at Theobald's Court, Strand."

10th Sept.—"Fire near Sadler's Hall, Cheapside—many houses burnt."

7th Nov.—"A most dreadful fire, Bishopsgate, along Cornhill and Leadenhall Street, Threadneedle Street, White Lion Court, etc., destroyed upwards of 100 houses, worse than in 1743."

FIRE INSURANCE, DANGEROUS STRUCTURES, AND CITY IMPROVEMENTS.

By the Act of 1765 (6 Geo. III., cap. 27) the fire insurance companies were given power, if necessary, to rebuild premises destroyed by fire. From the much greater risk incurred it might be expected that the premiums were high, but it is found that the premium charged by the Sun Fire Office was only 2s. 6d. per cent., as compared with the average price of 1s. 6d. per cent. current at the present day.

The Building Act of 1760 (33 Geo. II., cap. 30) was primarily to permit various street improvements (on the lines of the later Michael Angelo Taylor's Act), the new streets being mainly 50 feet wide, though 40 feet and 20 feet passages are also mentioned. By this time it had been found that the Act of 1725 as to rebuilding party walls was in itself defective, and applied only to cases where one of the houses was to be newly erected or rebuilt. It had also been found that the jury of workmen were frequently equally divided in opinion; power was accordingly given to the Lord Mayor to appoint one more workman to solve the *impasse*.

Party walls were in future to be a little thicker than under Queen Anne—viz., 2½ bricks thick in cellar and two bricks thick above. Timbers in party walls were to be 9 inches distant from each other, and the general price of brickwork had now increased to £7 per rod.

This is the first Act dealing with *dangerous or ruinous structures*, and is very much on present-day lines. The procedure was for the Court of Commissioners to order such structures to be hoarded round, and to give notice to the owner to "take down or repair forthwith," and in default the Court might do the work and charge the owner or the future occupier.

The Schedule of Street Improvements attached to this Act is a very comprehensive one, and shows that so long ago as 1760 people were considering facilities for City traffic. No less than 34 separate improvements are scheduled. There appear to have been some disputes as to the powers of the Corporation Improvements Committee, for five years later, in 1765 (6 Geo. III., cap. 27), an explanatory Act was necessary. We can well understand this when we find in the original Act such generalities as the following: "To pull down the tin shop and the trunk maker's house at the south-west corner of Cheapside, leading into St. Paul's Churchyard, and to lay the ground into the street."

THE "NEW ROAD."

"*The New Road* (Euston Road, &c.), 1756 (29 Geo. II., cap. 88).—To enable the respective trustees of the turnpike roads leading to Highgate Gatehouse and Hampstead and from Saint Giles Pound to Kilbourn Bridge, in the County of Middlesex, to make a new road from the Great Northern Road at Islington, to the Edgware Road near Paddington, and also from the north end of Portland Street cross the Farthing Pye House Fields into the said new road, and for enlarging the terms and powers granted by two several Acts for repairing the said road from Saint Giles Pound to Kilbourn Bridge."

So runs the brief description of the greatest and most farsighted piece of street planning in the middle eighteenth century. The New Road from Paddington to Islington which, as the Euston Road, Marylebone Road, and Pentonville Road, now forms so vital a metropolitan thoroughfare, was laid out in open fields a mile or more away from the built-up area, but with a width of 150 feet between the buildings. With this example of our great-grandfathers before us, why do we so often take a limited view of the future, when London shall be vaster by far than the London we now know?

The laying out of the great "New Road" was not the only evidence of foresight in the direction of wide roads sufficient for the future needs of the metropolis. The general Turnpike Acts, so long ago as 1773, provided for turnpike roads to be at least 60 feet wide, and no encroachment in the way of hedges or ditches was allowed within a distance of 30 feet from the centre of any turnpike road.

PUBLIC IMPROVEMENTS.

The early years of George III. were remarkable for the thirst for public improvements in London; indeed, there are many suggestions to be found in these projects which might well be taken to heart both by the Institute and the newly formed London Society.

One of the most complete and carefully thought-out schemes for London improvement is to be found in a book by John Gwynn, published in 1766 under the title of *London and Westminster Improved*, illustrated by Plans, to which is prefixed a discourse on Publick Magnificence. Gwynn was the architect of the well-known English bridge at Shrewsbury and a friend of Dr. Johnson. As an architect, he was a keen advocate of a complete town plan for the already overbuilt capital, and in his opening remarks he says: "The rage of building has been carried to so great a height for several years past as to have increased this metropolis in an astonishing manner. For want of such a publick direction, those very buildings which might have been easily rendered its greatest ornament are a melancholy proof of the necessity of adopting a well regulated plan," and even at this late period he hopes it will be possible to do something. He feels, however, that "if these hints or those of others on the same subject are not timely attended to, that publick negligence will unavoidably produce publick deformity, and publick deformity must certainly produce publick disgrace." His first proposal is that the new road from Paddington to Islington shall be considered as the great boundary or line for restraining and limiting the rage of building, and that Hyde Park shall constitute the ultimate western boundary beyond which no building shall be permitted on any pretence whatever.

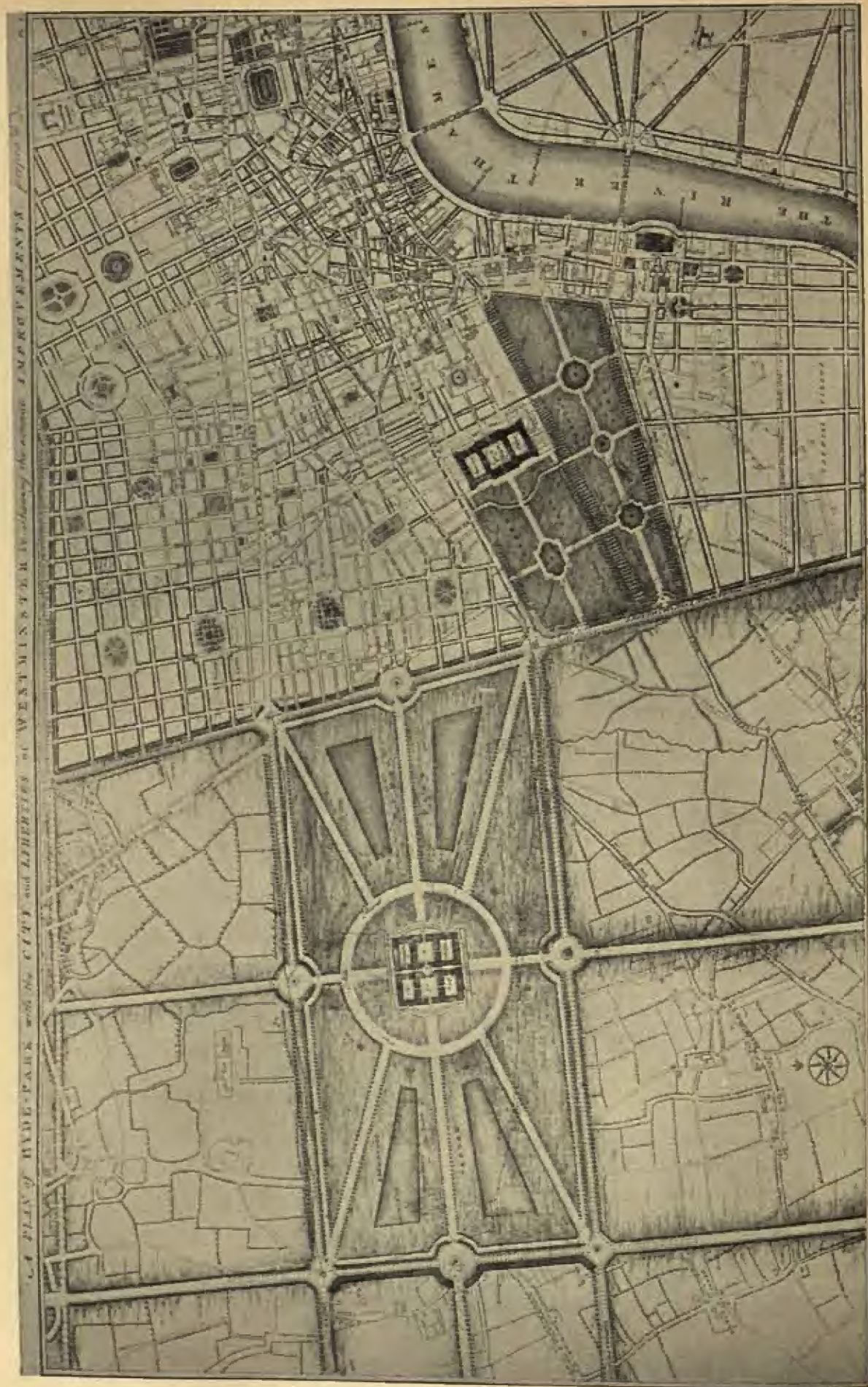
In France the same idea was current, for we find from the *Annual Register*, 1765 (p. 113):

"The King of France has already forbid the erecting any additional buildings at the ends next the country of the streets belonging to the suburbs of Paris, upon any pretext whatsoever, either upon the ground belonging to the city, or the parish adjoining: and likewise the opening of any new streets in the said suburbs; and directs that the streets now in being which are less than 30 feet wide shall be extended to that width, whenever the proprietors shall rebuild their houses."

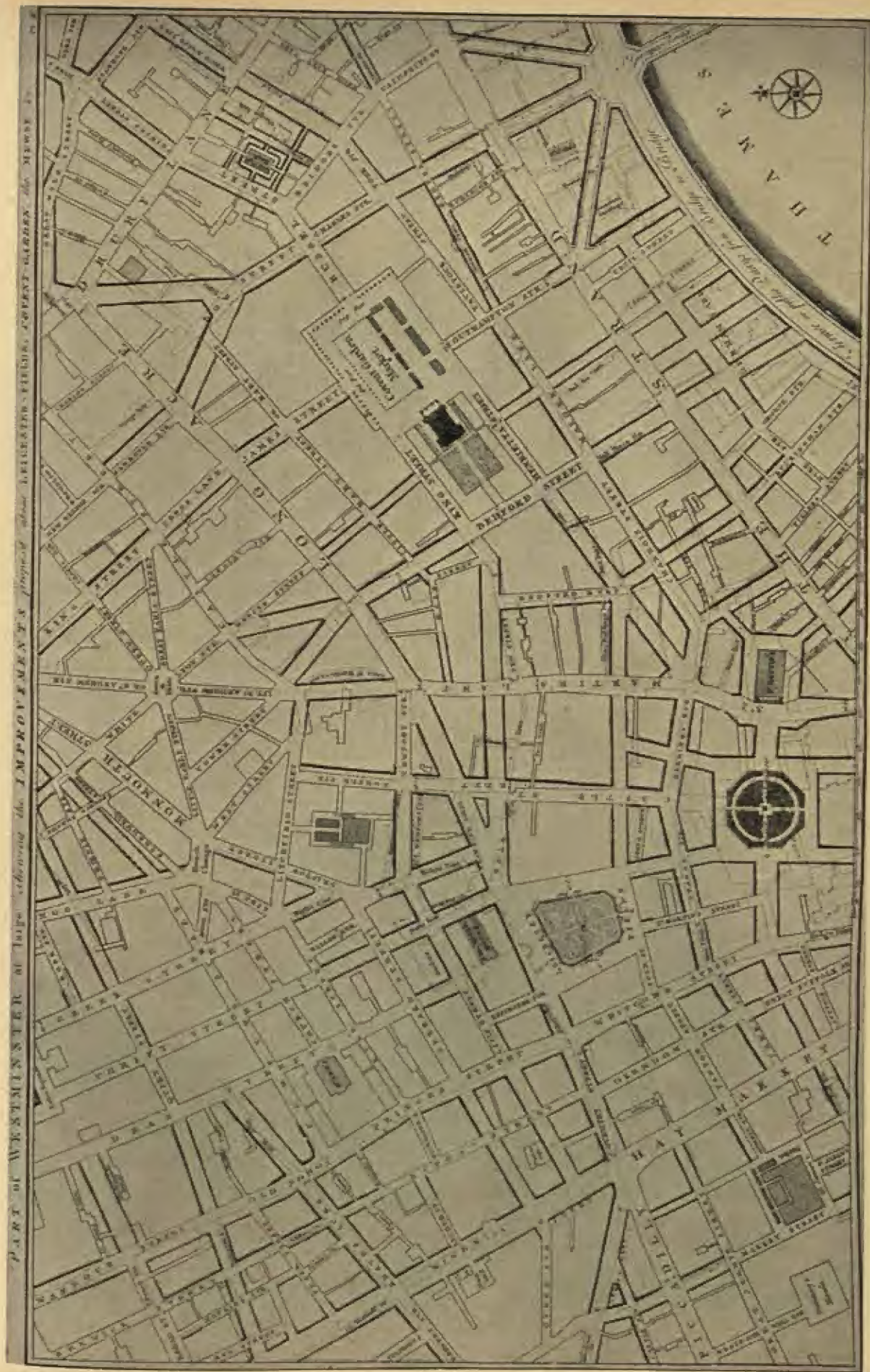
Even at that date, however (1766), the intention of the judicious clause requiring buildings to be set back at least 50 feet from this new road (Euston Road) was being defeated by the erection of high garden walls within that distance, and Gwynn especially notes the mean appearance of the "back fronts" everywhere visible.

One or two illustrations of Gwynn's proposals will serve to show that nearly all the important improvements that have since been effected were foreshadowed by him: The Thames Embankment (but from Westminster to the Tower); Waterloo Bridge; Parliament Square; the Processional Way and entrance to Charing Cross; a public square at the west of St. Martin's Church where now stands Trafalgar Square; new streets between Holborn and the Strand; New Oxford Street, Moorgate Street, and many others, are all shown on Gwynn's plan a century or so before they were actually executed. This should give encouragement to the bold dreamers of the present day who can look forward with the eye of the seer to a London of the future, compared with which the present London is but a *faubourg*.

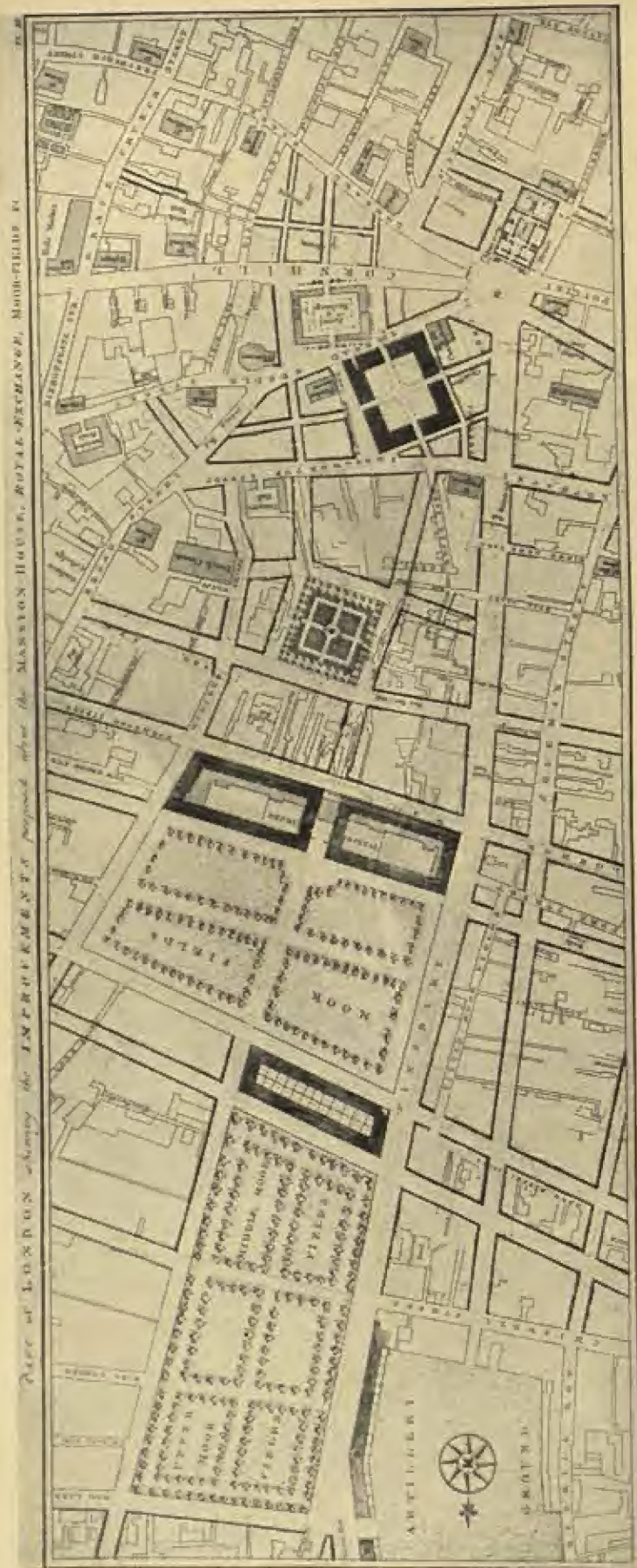
Gwynn, with his modern up-to-dateness, looked to the future of the south side of the river, in his days known as "St. George's-Fields," which he describes as "the only spot now left about London which has not yet fallen a sacrifice to the depraved taste of modern builders." He, too, voices the old lament, "notwithstanding the amazing encrease of buildings, houses are still procured with difficulty and the rents of most are perpetually encreasing." This, too, sounds refreshingly modern: "There is one circumstance which is pleasant enough and is now carrying on with great success by the landlords, in those streets which are at this time new paving, which is, that although the expense of paving and lighting the streets in the manner prescribed by the Act falls entirely upon the tenant, yet the landlords taking advantage of a benefit they never intended or have in the least contributed to, fail not wherever they are not prevented by a lease to raise their rents in the most arbitrary manner." It is also interesting to hear an architect of the eighteenth century complaining that architectural work was



JOHN OWYEN'S PROPOSALS—1766.



JOHN GWYN'S PROPOSALS—1766.



JOHN GWINN'S PROPOSALS—1760.

sometimes given to upholsterers and furnishing firms, and even "artistic copyright" is touched upon. Suggestions occur as to sewers and subways to avoid breaking up the streets, ordnance survey maps are proposed, and so on.

A Paper read at this Institute sixty years ago* (1854) pays a well-deserved tribute to Gwynn's admirable work, *London and Westminster Improved*, which for nearly a century had then been "a guide and a text book at Whitehall as well as at Guildhall." Many of his suggestions had been adopted, and in every case with complete success.

There were many others who thought with Gwynn. T. Malton, famous for his engravings, wrote in 1792:

"It is greatly to be regretted that all public improvements are not subject to some legal control that, without materially affecting the rights of individuals, might prevent them from disgracing their country with meanness and absurdity."

The approach to London from the Kentish Road, by which travellers from the Continent usually enter the metropolis, was, within these few years, highly picturesque and striking. The spacious area of St. George's Fields, intersected by roads, by night with its many long rows of lamps, exhibited all the splendour of a festive illumination."

In considering the schemes for the improvement of London we must not forget the work of George Dance, who did so much for the improvement of the City of London. His proposals in 1796 for a double bridge to replace the then existing London Bridge, and also for the general improvement of the Port of London, are noteworthy as showing a foresight far in advance of his time.

THE RIVER THAMES AND ITS EMBANKMENTS.

The guardianship of the River Thames has until recent years been almost a special prerogative of the City. As early as the reign of Henry VII. an Act was passed giving to the Mayor of London the rule of the River Thames from Staines to Yenlade and Medway. The City Fathers have always been very jealous of this prerogative, and many have been the recurring struggles to resist encroachment from the projection of wharves and embankments into the river.

The brothers Adam in their great building scheme for the Adelphi appear to have been offenders in this respect. In September 1770, a Committee of Inspection appointed by the Court of Common Council to view the new embankment at what was then called Durham Yard reported that "the buildings erected by Messrs. Adam project into the river 28 feet, and that their further encroachments by earth and rubbish project into the river 175 feet in depth and 397 feet in length."

The Watermen's Company and others made serious complaints about these obstructions in the river, and all such encroachments, although subsequently sanctioned by the Corporation, were very closely watched. During a period of 70 or 80 years there were at least ten such embankments constructed at considerable expense, all of which were swept away by the great Thames Embankment Scheme, which came to final fruition in 1870. The south side embankment, foretold by Gwynn 150 years ago, has yet to be put in hand, but it will have to be done.

FURTHER CONSTRUCTIONAL REQUIREMENTS.

Suburban villas, highwayside retreats
That dread th' encroachment of our growing streets;
Tight boxes, neatly sashed, and in a blaze
With all a July's sun's collected rays,
Delight the citizen who, gasping there,
Breathes clouds of dust, and calls it country air.—COWPER.

The Building Act of 1764 (4 Geo. III., cap. 14) made it definitely clear that party walls, if defective or out of perpendicular, could be treated as dangerous structures, although neither of the adjoining houses might require to be rebuilt, and the price of brickwork was reduced to £6 10s. per rod. In addition to the party walls the back and forefronts of all future buildings were to be of stone or good brick from the breastsummer upwards; no timbers, except binders or purlins, were allowed in party walls, and, in any case, there were to be 9 inches of solid brickwork between. No timber was allowed

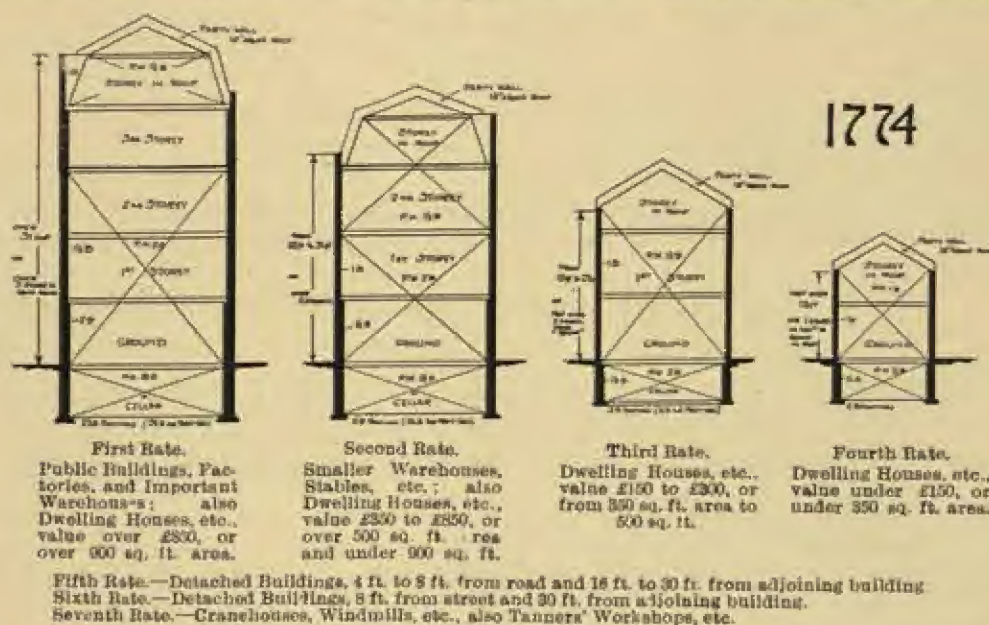
* "Open Spaces of the Metropolis." S. Angell, TRANSACTIONS R.I.B.A., 1854.

under any hearth or within 9 inches of a flue. The Justices were by this time becoming a power in the land, and the Lord Mayor appears to have relinquished his previous powers, possibly as a result of the feud between the Crown and the City which marked the early years of George III.

A very important clause of this Act laid down that after the 1st July 1764, "every master builder who shall erect or build any house shall *within 14 days after it is covered in*, cause the same to be surveyed by one or more surveyors, who are to make oath before a Justice of the Peace that the same has been built and erected agreeable to the Act."

It is curious that this Act repeats the error of Queen Anne's Act of 57 years earlier by imposing a penalty for every offence of £50, but not providing for enforcement of the actual requirements. One-half of the penalty went to the informer and one-half to the poor of the parish.

There were two Building Acts passed in 1765 (6 Geo. III., cap. 27 & 37), from both of which it appears that the enforcement of the Act in those days was more troublesome than at present. The carefully drawn sections of preceding Acts giving a right to repair a defective party wall had forgotten to include a *compulsory right of entry* for the builder, and this was now included, though a somewhat similar



power existed 40 years earlier. It was also once again discovered that a £50 penalty could not put irregularities right, and once again, word for word, the Act of 1765 repeats the penitential confession of 1724 and allows the penalties to be waived provided only the work is put right. A penalty of £5 was also, for the first time, laid on workmen wilfully infringing the Act. For a short period longer (1764) all party walls were required to be 18 inches above the roof, but in 1765 (6 Geo. III., cap. 27) the height of the party wall above the roof was reduced to 9 inches above the tiling, and this exposed portion was to be of stone or hard, well-burned bricks. This was again altered to 18 inches by the later Act of 1774.

In 1772 (12 Geo. III., cap. 73) still another Act came in, with a great flourish of trumpets, one of its effects being to penalise the occupiers of rooms or apartments responsible for chimney fires, to the extent of paying the rewards to the various fire engines. The whole Act was, however, dependent upon the common informer, and was soon found to be unworkable, and the great Codifying Act of 1774 (14 Geo. III., c. 78) took its place. This Act is noteworthy as establishing the appointment of District Surveyors in their present form to administer the building laws, and also for the fact that the Act lasted upwards of 70 years, well into the reign of Queen Victoria, without amendment of any sort.

To simplify the requirements as to thickness of walls, &c., buildings were divided into seven rates or classes. The following is a summary of the principal requirements:

Party Walls.

Party wall notices. Requirements of adjoining owner to be complied with. If old party wall pulled down, settlement of differences to be made by a jury.

If either house rebuilt and party wall 4 storeys high is not of required thickness, the party wall to be considered as if condemned or adjudged ruinous.

Timber partitions allowed to remain until one of adjoining houses rebuilt or two-thirds front pulled down to first floor level.

Party walls after 1774 to be carried up 1 foot 6 inches above roof of the highest building (measured at right angle with back of rafter) and to full height of dormers within 4 feet.

Parapet walls at least 1 foot above gutter.

No recesses to be made in party wall except chimneys, flues, &c.

No party wall openings after 24th June 1774, to be made in any party wall, except for communication from one stack of warehouses to another, and from one stable building to another, all which communications shall have iron doors.

Timbers, if any, in party wall to have 8½ in. solid brickwork between and at least 8½ in. from any chimney or flue.

Arches Over and Under Public Ways.

In 1st and 2nd class, 13 inches thick; in 3rd and 4th class, 8½ inches thick.

Chimneys and Flues.

Chimney backs to be 13 inches thick in cellar and 8½ inches thick in all floors above from the hearth to 12 inches above the mantel.

Breasts at least 8½ inches thick in cellar and at least 4 inches thick in other storeys.

Breasts, chimney backs, and flues to be rendered or pargeted within and without.

Chimney backs next vacant ground to be marked with lime or in some durable manner, except where not likely to be built against.

Hearths to be of brick or stone and at least 18 inches broad and 1 foot longer than opening.

In intermixed buildings the construction of proper party arches and floors was required, and this led to the first *special exemption* for Sergeants' Inn and the Four Inns of Court. Even in the Inns of Court, however, the walls or divisions between the chambers communicating with each separate and distinct staircase were to be deemed "party walls."

Difficulties as to intermixed buildings and party structures were dealt with by a jury specially appointed in each case. No other exemption existed, except for royal palaces and Crown buildings.

Defective Party Structures could be repaired by the building owner giving three months' notice of his intention to repair. Cost was to be apportioned at the rate of £7 15s. per rod for new brickwork, old materials being allowed for at stipulated rates.

Window and Door Frames were again required to be set in reveals at least four inches deep, exception being made for shop fronts and stall boards on the ground storey.

Roofs to be covered with glass, copper, lead, tin, slate, tile, or artificial stone.

Projections from buildings were required to be of brick, stone, artificial stone, etc. (in the same words as Sect. 73 of the 1894 Act), exception being made for cornices and dressings to shop-windows and for covered ways not extending beyond the original line of the houses. No water was to be allowed to drip next the street, except from porticoes and from proper gutters. No pipe conveying steam or smoke to be fixed next to any street. No bow window or other projection was to be built after 24th June 1774, next to any public street so as to extend beyond the general line of the front, except copings, cornices, fascias, window dressings, or for open porticoes, steps or iron palisades. Bow windows behind the line of frontage allowed if of fireproof material. Shop fronts, or rather stall boards, however, were allowed, again in terms which have survived word for word to the present day—

In a street 30 feet wide or more, to project 10 inches and cornice 18 inches.

In a street less than 30 feet, to project 5 inches and cornice 13 inches.

Limitation of Size of Warehouse Buildings was effected by prescribing that no stack of warehouses after 1774 should contain more than 35 squares in area, and no additions were to be made beyond this limit, unless the warehouses were divided by one or more party or division walls separating the building into divisions of not more than this amount. Wrought-iron doors ¼ inch thick were required in all openings in such party walls. Stable buildings were similarly limited to 25 squares in area.

Tenement Buildings.—Buildings converted into two or more tenements on the ground floor: each tenement was to be considered as a *separate building*, and divided off by party walls. The penalty clause is interesting, in the light of previous failures to secure the removal of irregularities:

"If any person or persons presume to build or to cause the building or beginning to build or to alter or cause to be altered any building already erected, and be convicted by oaths of two witnesses, then the said house, building, or wall so irregularly built, shall be deemed a common nuisance, and in default of compliance with order, the person making default shall be committed to the common gaol, there to remain, without bail or mainprize, until he shall have abated or demolished or otherwise amended the same."

The Lord Mayor and Aldermen or Justices of the Peace in Quarter Sessions were "to appoint such and so many discreet persons skilled in the art of building, as they shall think fit," and the surveyors thus appointed were to take a solemn oath as to the conscientious performance of their duties. Due notice was required to be given to the surveyor by the master workman or other person 24 hours before the commencement of any work. In case of neglect to give notice, treble fees were payable in addition to a penalty of £20. The schedule of fees payable to the District Surveyors was as under:

New building, not exceeding £3	10	0	for 1st class, or for additions and alterations,	£1	15	0
"	3	3	0 .. 2nd	"	1	10 0
"	2	10	0 .. 3rd	"	1	5 0
"	2	2	0 .. 4th	"	1	1 0
"	1	10	0 .. 5th	"	0	15 0
"	1	1	0 .. 6th	"	0	10 6
"	0	10	6 .. 7th	"	0	5 0

It will be seen by a careful study that this schedule remains substantially the same to the present day for buildings of the same class or size.

The builder was required to have the building surveyed by the surveyor within 14 days after the building was covered in, and the surveyor to make his affidavit within 14 days.

Dangerous Structures.—On the representation by a jury that any house or building was in a ruinous condition, the Mayor and Aldermen of the City, or the churchwardens or overseers outside the City, were empowered to board up the building for the safety of passengers, and to cause notice to be given to the owners to repair or pull down as the case might be, and in default to take down and secure the premises themselves.

Dangerous Trades, such as turpentine distilling, were only allowed if 50 feet away from any other building. The provisions of Queen Anne's Act as to fire engines and rewards for attendance at fires were also re-enacted.

So scrupulously was the Act enforced during the long period of 70 years it remained in force that a special Act of Parliament had to be obtained in 1810 to permit of the use of John's Patent Tessera for covering houses. If every new patent nowadays had to secure a special Act of Parliament our legislators would have their hands full.

In 1840 (3 & 4 Vict., cap. 85) the Chimney Sweepers Act dealing with chimneys and flues was passed.

In the early years of Queen Victoria the coming of the railways and the great growth of population in all directions, and still more perhaps the demand for an efficient drainage system, necessitated a revision of administration. The former parochial system gave way to larger metropolitan ideals.

METROPOLITAN BUILDING ACT, 1844.

By the Metropolitan Building Act, 1844 (7 & 8 Vict., cap. 84), the area of London was extended to include the outlying districts of Fulham, Hammersmith, Kensington, Paddington, Hampstead, Hornsey, Tottenham, St. Pancras, Islington, Stoke Newington, Hackney, Stratford-le-Bow, Bromley, Poplar and Shadwell, Chelsea (detached), Woolwich, Charlton, Greenwich, Deptford, Lee, Lewisham, Camberwell, Lambeth, Streatham, Tooting, and Wandsworth.

It was foreseen that further increase of population outside these limits was probable, and that the tendency to induce building speculation in such neighbourhoods was considerable. Power was



LONDON TWO HUNDRED YEARS AGO—1790.



LONDON ONE HUNDRED YEARS AGO—1810.

therefore actually reserved in the Act of 1844 for Her Majesty in Council to order by proclamation that the Act might be extended to *any district within 12 miles of Charing Cross*.

In order to secure general metropolitan improvements the Commissioners of Works and Buildings (Woods and Forests, etc.) were set up, and to secure uniformity of practice a central office of Metropolitan Buildings was established, with a Registrar and two Official Referees appointed by the Government—the nearest approach to a "Court of Building" which London has ever seen.

The District Surveyors still continued to be appointed by the Lord Mayor and Aldermen or by the Justices in Quarter Sessions, but for the first time the statutory examination qualification was prescribed, which has now been in existence 70 years. Any appointment or alteration of districts was, however, subject to the consent of one of H.M. Secretaries of State.

The Official Referees were architects in practice, whose function was to exercise discretionary powers in certain cases as to what was "good, sound, fireproof, fit, proper, sufficient," etc. They were the official arbitrators in cases of dispute, and in order to properly record their decisions in cases of relaxation of the ordinary rules, and also to form some check on their actions, the Registrar of Metropolitan Buildings was appointed by the Commissioners of Works and Buildings, both Referees and Registrar being directly employed by Government.

For the first time in 1844 provision was made for *new streets*, which were required to be 40 feet wide, or such greater width equal to the height of the buildings. Every alley and mews was in future to be at least 20 feet wide, or such greater width equal to the height of the buildings.

Drainage, too, was now made compulsory, though one or two requirements sound curious in these days. The main drain under and from every building was required to be at least 9 inches in diameter, of brick, stone, or slate, and laid with a fall of at least $\frac{1}{2}$ inch in 10 feet (1 in 240). Cess-pools, "if built under a house," must be airtight, and so on.

Open Space about Buildings was also dealt with for the first time, a minimum amount of 100 square feet being required for dwelling houses. Under certain circumstances an open well hole, 75 square feet in area, above the level of the second storey was, however, allowed; but no stipulation was made for any particular width. Every building had to be built with some roadway to it wide enough to admit a scavenger's cart.

Basement Rooms and Rooms in Roof were only allowed under specified conditions.

The ordinary constructive requirements did not differ greatly from the preceding Act of 1774, the principal differences being:—

(1) The previously existing seven classes of buildings were reduced to *three*, viz.—First, or Dwelling House class; Second, or Warehouse class; Third, or Public Building class.

(2) All Government buildings and Crown buildings were placed under special supervision of the Official Referees, to whom notices and plans had to be sent, and all important buildings were subjected to double supervision by the Surveyor and the Official Referee.

(3) Docks and warehouses of St. Katharine's, London, East and West India Docks, were exempted from supervision.

(4) Buildings of the London and Birmingham Railway within and in connection with the works of their railway were also exempted.

Disputes as to existing contracts or leases were to be settled by the Surveyor of the district, or on appeal by the Official Referees. Commissioners of Works had power to modify rules on the recommendation of the Official Referees.

Two days' notice was now required to be given to the Surveyor before commencement of work, and special notices to the Official Referee on completion of the brickwork, and also before occupation. No important building was allowed to be used without a certificate of approval from the Official Referees, under a penalty of £200 a day.

Notice of irregularity in its present form was also introduced, with the important difference

that in case of non-compliance an "order" might be made by the Official Referees without resort to a magistrate.

Three months' notice was still required before rebuilding a party wall, but the adjoining owner was only allowed two months to make any special requisitions, although he had power to ask for the work to be delayed, any dispute being settled by the Official Referees, on the report of the Surveyor for the district. One month was sufficient when building next vacant land.

Chimney breasts on party walls could only be cut away by giving one month's notice and making good in cement to the satisfaction of the Surveyor. Any damage done to a party wall, in the opinion of the Surveyor or the Official Referees, had to be made good by pulling down and re-instating.

Existing buildings might be raised an additional 10 feet, with the approval of the Surveyor, even with walls of less than the prescribed thickness.

One month's notice was for the first time held to be sufficient for rebuilding or altering party fence walls. Anybody wishing to raise a party fence wall "to screen from view any offensive object or neighbourhood" could apply to the Official Referees to authorise such work, but not so as to obstruct the free circulation of the air or to injure the property adjoining."

The party walls between chambers in the Inns of Court were specifically brought within the Act, and such walls must be built in conformity with the regulations.

Dangerous structures were dealt with by the Official Referees requiring a survey, the certificate being then sent to the City Corporation, or, if outside the City, to the Overseers of the parish. It was thereupon the duty of the Mayor and Aldermen and Overseers to shore up or hoard in the premises and to give the necessary notice to the owner to repair or pull down within 14 days.

The Mayor and Aldermen or the Overseers could appeal to the Official Referees against the certificate, but the unfortunate owner seems to have had no redress.

Ruinous chimneys, roofs, and projections were dealt with by the Surveyor requiring the occupier (or in unoccupied houses the owner) to take down or secure the same within 36 hours. In default, on complaint to a Justice of the Peace, it was the duty of the Justice of the Peace "to proceed to cause such chimney shaft, chimney pot, or other thing thereon, or the eaves or parapet or coping or slates or tiles on the roof, or projection from the *front or side* wall of such building, as shall be considered by such Surveyor in danger of falling, to be forthwith taken down or secured."

Expenses incurred in connection with party walls were to be valued at the rates and prices fixed by the Official Referees, to whom appeal could be made in case of difference, and the items allowed or disallowed.

Dangerous businesses were, as in the 1774 Act, only allowed in buildings 50 feet from any other building, and at least 40 feet from a street. Public gasworks were for the first time mentioned as being exempt from this provision. Noxious businesses were now, however, added to this restriction.

In public buildings, the floors of all halls, corridors, stairs, and linings were required to be fireproof. Porticoes over the public footway could be sanctioned by the Official Referees, but balconies, verandahs, porches, porticoes, shop fronts, &c., were allowed beyond the general line of fronts if constructed of fireproof materials, but not over the public way.

The existing rules as to shop fronts date from 1774 and have been re-enacted in the majority of Acts since that date. The rules as to chimneys and flues also remain almost identically the same.

Warehouses were allowed by the 1844 Act to extend to 200,000 cubic feet without party or division walls, in lieu of the area previously allowed.

METROPOLITAN BUILDING ACT, 1855.

By the Metropolitan Building Act, 1855, the newly created Metropolitan Board of Works took over most of the duties and powers of the Official Referees and Registrar, who were, of course, suitably compensated, as well as the clerks and other officials in the "Office of Metropolitan Buildings," and the official supervision of Government buildings ceased entirely. The exemption list was at

the same time considerably extended. The constructional rules were slightly stiffened up, for the first time a minimum height of 7 feet being insisted on for habitable rooms. The open space requirement of 100 square feet remained as before. In particular, however, the rules as to separation of buildings were made more stringent, and in any building divided into two or more separate tenements with separate entrances, each tenement was deemed to be a separate building. The allowable size of warehouses, &c., was again increased to 216,000 cubic feet.

The Royal Institute of British Architects now took over the conduct of the Statutory Examination, and no District Surveyor can now be appointed unless he holds the certificate of competency.

The powers of the Metropolitan Board of Works included power to alter the regulations as to thickness of walls and to make general rules as to procedure. A copy of any plans approved by the Board had, however, to be furnished to the District Surveyor, whose duty it then was to see such approval carried out. Dangerous structures were not immediately dealt with by the Board, but by the Commissioners of Sewers within the City area and by the Commissioners of Police outside the City, the Commissioners requisitioning surveys from the District Surveyors as circumstances required. The provisions of the 1844 Act as to dangerous and noxious businesses were still retained in operation.

The fees payable to District Surveyors in respect of new buildings were the same as at the present day, but with a proviso that no fee should exceed £10. A special fee was introduced for inspecting dangerous structures, by direction of the Commissioners of Police, 20s., thus reserving, to some extent, the continuity of Government employment.

The sanitary requirements were dealt with by a separate Act, the Metropolis Management Act, 1855, which has since been followed by other Public Health Acts and by-laws. The City of London Sewers Acts of 1848 and 1851 were the first of these special sanitary enactments, the Commissioners of Sewers being also empowered to deal with dangerous structures.

PRESENT DAY CONDITIONS.

Of the London Building Act, 1894, and its various amending Acts (of 1898, 1905, 1908, 1909) I need say but little. The Act is at present in force and its provisions are every day in constant use or abuse. Most critics will agree that the present Acts and by-laws made under the Acts, although somewhat complex and in need of simplification, are by no means too stringent. In some respects possibly the requirements are too lenient. For instance: Concrete need only be 9 inches thick, instead of 12 inches, the usual minimum depth outside London; lime concrete is allowed, instead of cement concrete required elsewhere; the use of burnt ballast is permitted for concrete; and so on; and, strange to say, the special by-laws as to the composition of bricks, concrete, plastering, and mortar are not in force within the limits of the City Corporation; in other words, the constructive requirements, instead of being more stringent in the City, are entirely the reverse.

Much good has been done by the improved provisions as to air space at the rear of buildings. The tendency of the relaxations permitted by the Act in rebuilding premises on narrow streets will also have an immense bearing on the future of London, but in the reverse direction. As things at present stand, an old building, even one storey in height, whose plans have been duly certified by the District Surveyor, may be re-erected of any height up to 80 feet, subject only to certain restrictions as to working-class dwellings, which, since 1894, are required to be set back to increase the width of the street to the same as the height of the new building.

This restriction does not apply to warehouse or similar buildings, and, given certified plans of the old buildings, it is possible to erect huge warehouses 80 feet high on old sites previously occupied by two-storey houses, without possibility of restraint except from owners of adjacent "ancient lights." If the premises are in the same ownership the unfortunate occupier has no remedy.

In one case that has been brought to my notice the present street is only 15 feet wide, with houses not more than 18 feet high, but there is nothing to stop the erection of new buildings to almost

any height, and, with the best of intentions, the County Council is at present powerless in this respect. Old and insignificant buildings in advance of the general line of buildings may also be re-erected without let or hindrance, provided they do not exceed 80 feet in height.

The state of London's narrow streets is steadily going from bad to worse, and with the erection of newer and higher buildings in place of the old, the future prospect cannot be regarded with equanimity by anyone having the interests of London at heart, and London improvements are, under these circumstances, daily becoming more costly. A right to re-erect old buildings to the old height may be reasonable, but, in the interests of the community, any increased height should be under careful regulation. Power is also needed in the interest of wise town extension to fix building lines both for new and old streets, and to regulate the height of buildings in relation to the width of the streets on which they abut.

IMPROVEMENTS OF THE NINETEENTH CENTURY.

The continual growth of the Metropolis in the early half of the nineteenth century was the subject of much thoughtful attention. The turnpike trusts were gradually consolidated, and Commissioners were even appointed to lay down various new routes for main roads leading out of London. The Seven Sisters Road, Holloway, and Goldhawk Road, Shepherd's Bush, were amongst the results achieved about 1833, before the coming of the railways. Then, too, about the same time (1829) an interesting suggestion was made that London should be allowed to grow in concentric rings of town and country, the belts of suburbs being separated by broad parklands. Unfortunately this project was not considered seriously.

Between 1832 and 1851 some eleven or twelve Special Commissions were appointed by Parliament to consider various plans for the improvement of the Metropolis:

- 1833. Open Spaces and Public Walks ;
- 1836. Metropolis Improvements ;
- 1838. Metropolis Improvements ;
- 1844. Metropolis Improvements Commission ;
- 1846. Metropolis Railway Commission ;
- 1855. Metropolitan Communications ;



Proposal made in 1829 to provide for future growth of London.

to which may be added the Royal Commission on London Traffic, 1905. Many of the proposals attached to these reports are of great interest. The early successes of the railways, however, destroyed any hope of improved road communication, and for nearly eighty years hardly any new main roads have been constructed.

A proposal which had great weight at the time it was introduced, and afterwards resulted in the construction of the main intercepting sewers, was a plan introduced in 1836 by Mr. John Martin, R.A., who was well known as an artist. Mr. Martin's plan was submitted to the then Institute of British Architects on 29th February 1836, and was warmly approved. Briefly his proposal was for the construction along each bank of the river of a large sewer 20 feet wide, the purpose being primarily to divert the many offensive sewers then discharging direct into the river. The proposal, however, involved much more than this, including, as it did, a continuous extent of quays or public promenades along the whole river front. Here we have another forerunner of the Embankment scheme.

A Select Committee of the House of Commons had been previously appointed in 1833 to consider

the necessity of Public Walks and the Propriety of Establishing Public Baths. From the evidence before this Committee it appears that at that date there was not a single public open space or public walk north or east of London, anywhere from the Hampstead Road round to the river. Even now, with the exception of the disused burial grounds and the open spaces of Moorfields and Victoria Park this area is not much better served.



PROPOSAL FOR THAMES EMBANKMENT (SOUTH SIDE), 1836, BY JOHN MARTIN, R.A.

STREET IMPROVEMENTS OF THE NINETEENTH CENTURY.

Apart from innumerable street widenings, the following is a list of some of the important new streets cut through the built-up area during the century :—

		Opened
Regent Street...	...	1819
Cranbourn Street	...	1844
New Oxford Street and Endell Street	...	1845
Victoria Street, Westminster (with aid of considerable grants from the coal duties)	...	1852
King William Street, London Bridge	...	1834
Moorgate Street	...	1846
Cannon Street (Western Portion)	...	1854
Farringdon Road	...	1856
Holborn Viaduct and Charterhouse Street	...	1860
Garrick Street	Completed 1861	1876
Southwark Street	1862	1884
Burdett Road, Victoria Park	1862	1886
Queen Victoria Street	1871	1887
Commercial Road (extension)	1870	1892
Holborn (removal of Middle Row)	1867	1896
Commercial Street, E.	1858	1894
Great Eastern Street	1876	1905
Clerkenwell Road and Theobald's Road	1878	1910
Northumberland Avenue	...	1876
Eastcheap (Over Metropolitan Railway)	...	1884
Shaftesbury Avenue	...	1886
Charing Cross Road	...	1887
Rosebery Avenue	...	1892
Middlesex Street (extension)	...	1896
Tower Bridge Road	...	1894
Strand widening, Aldwych and Kingsway	...	1905
Charing Cross and Mall and Processional Way	...	1910

Thames Embankments.

Victoria Embankment, 1870	Total length, 3½ miles
Albert Embankment, 1869	
Chelsea Embankment, 1874	

Principal New Parks.

Regent's Park, 1820.

Victoria Park, 1841, cost £130,000.

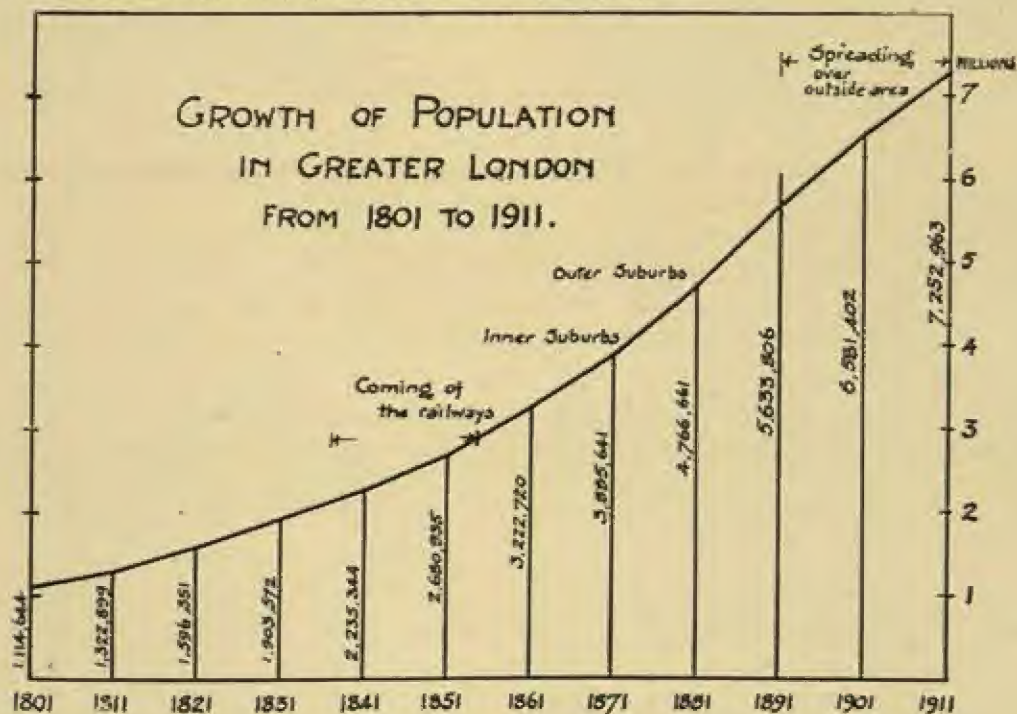
Battersea Park, 1846, cost £316,000, all then on the outskirts.

Finsbury Park, Brookwell Park, and many others.

The question of finance has always been a difficult problem, and in the early Commissions we find considerable space given up to the consideration of public lotteries as a means of raising money. But, after all, there is plenty of money available, and we have only to remember the reckless hacking and cutting that was done by the railways a half century ago to see what great things are possible. Paris has spent her millions and is still willing to spend freely; why not London?

Nearly all the London improvements of the past have been carried out by means of indirect taxation. The coal tax of 1s. 3d. a ton which was devoted almost entirely to purposes of street improvement produced in 1859 as much as £240,000, and is stated not to have been appreciably felt. The coal tax was finally abolished in 1890 (and the price of coal is no lower).

The growth of London has all through the centuries been a source of wonderment and pride to successive generations of Londoners. Each generation, as it entered into its inheritance, has felt a glow of conscious pride at the immensity of the City, and each in its turn has felt that the limit of the vast metropolis had been reached and that the prodigious increase could not go on. It has gone on though, and bids fair to keep on going on at an even accelerated pace. The following diagram of the growth of London during the last century will make this clear:—



Statisticians may say that the last decade shows a decline, that the County of London has actually less people than ten years ago; but *London* knows nothing of county boundaries or administrative areas. The vast community which looks to London City as its focus is spread over an area much greater even than the Greater London of the Metropolitan Police area, stretching as that does to a circle of over 30 miles in diameter. In less than fifty years the population will be double what it is to-day; the present generation has before it the task not only of improving our present-day London but of building an immense city as large again, which shall encircle it north, south, east and west. We must prepare, and prepare at once, for so gigantic a task. We can see ahead but a little way, but that little way is lighted by the illumination which comes to us from the past.

DISCUSSION ON MR. DAVIDGE'S PAPER.

Mr. H. V. LANCHESTER, *Vice-President*, in the Chair.

The Right Hon. VISCOUNT PEEL, Chairman of the London County Council, in moving a vote of thanks to Mr. Davidge, said he had never listened to a Paper on the subject of London which had interested him so greatly. The reader had touched upon a variety of complex subjects with a sure and a most entertaining hand. He confessed, as one of London's administrators, it made one feel a little modest if one was inclined to be arrogant as to the improvements and changes which they were introducing into London at the present time. Their wildest dreams seemed but a pale reflection of some of the designs and proposals of their ancestors. He had been struck by a little coincidence in the course of the Paper. The reader referred to the Report of the Royal Commission on Traffic, and it would be remembered that—not in the Report itself, and he drew their special attention to that, because a good deal turned upon it—in the Report of the Engineers they suggested one great road to run north and south, and another great road to run east and west. But that appeared to be not an original suggestion; it was a sort of Roman plagiarism drawn from the old maps of early London, which showed the town beautifully and evenly divided by one road running north and south, and another running east and west. As one who had been Chairman of the London Improvements Committee, he could not help a feeling of regretful emotion in looking at that picture of Saturn-like London with its rings of buildings and rings of park lands; how delightful they were, and how unattainable they seemed to us! Studying these old maps, one could not help being struck by the many admirable things which were not only imagined, but actually carried out in those days—such, for instance, as the noble 150-foot wide road originally planned from Pentonville to Edgware Road. These things were designed when London was much smaller, and later, during some obscure time—in the times of our grandfathers, let us say—there seemed to have been a forgetfulness of these things, a sort of lax period had set in when all those splendid schemes were forgotten and the open spaces so wisely planned were built over. People criticised the London County Council because they did not start some of those gigantic schemes. London, they said, deserved, and ought to have, great bridges, and wide and noble streets. But when the rates were put up a modest 2½d. in the £—a mere trifle, surely, to such a wealthy city—the whole world, architects,

artists, even the London Society itself, reproached the Council for such an infringement of their pockets. He thought it a very great thing that the Local Government Board had started the Arterial Road Conferences, to two of which the Chairman of the present meeting was lending his assistance, and he hoped some conclusion would be come to as to what should be the scheme of the main roads in the districts outside London.

CAPTAIN SWINTON, in seconding the vote of thanks, said it was a most painful thing to realise what we in London had lost, and how many opportunities had been given us by far-seeing men in the past, and how woefully we had neglected them. There were, however, certain opportunities still with us. If we could only get everybody to combine to see it through, there was a chance of doing something really fine on the south side of London, on that bit of ground between Blackfriars and Westminster. If the County Council could only get the Aldwych block off their hands they might find some possibility of launching forth. Mr. Davidge had shown them what they had missed within the County boundary. Outside it the same thing was going on every day. There was the wretched proposal of the by-paths road to get rid of the Brentford block. It would have very little effect, however, and it was not desired by the Brentford people. They wanted their High Street widened, so that they could get benefit in selling their frontages again. We did not look at these things from a big enough point of view. His personal view was that traffic and locomotion facilities were the secret of town planning. He felt some diffidence in saying that to architects; but he thought engineering and locomotion facilities should come before the building of houses. By enabling people to get further out opportunities were got for building fine houses which could never be got in these days on crowded ground. The more we could do to spread London—and the further out the better—the greater the advantage for the London of the future. Looking at the maps shewn them that evening, from the time of Elizabeth onwards, it seemed that the powers of the time were thinking only of the little bit for themselves; they never looked far enough ahead. And we were doing the same thing to-day. He could not imagine anything more useful to publish throughout London and every big city than a series of maps to show the opportunities which had been thrown away;

then they might rouse some public feeling which would tackle these things in a big way and insist that, somehow or other, a solution should be found. Personally, he did not think they should run the ratepayer too hard. For the Imperial City, the Capital of the Empire, they ought to be able to get some assistance from the Imperial Government. Another point was what he should call the neighbourly feeling; and he wished all the members of the architectural profession had rather more neighbourly feeling as regards the buildings next door to those they put up. There was the case of the Piccadilly Hotel and the building which had been erected next to it. He did not know who was responsible for it, but he thought it was a shame to the architectural profession. There was another example at the bottom of St. James's Street; that very fine red-brick corner house built by Norman Shaw. The house harmonised well with the old buildings of St. James's Palace; but to the right front they had now begun to put up stone buildings. Why had it not been possible to continue that building of Norman Shaw's for a certain distance, and so make a finished end of that corner of St. James's Street and Pall Mall? Lord Peel had mentioned Delhi and Building Acts. Delhi was in the fortunate position that the Government owned all the land of the new city, and presumably it would see to it that the class of buildings put up was entirely according to Government requirements. Mr. Lutyens and Mr. Baker, who arrived in England only on Saturday, were to continue for the next few years to spend the winter in Delhi; they would not only be responsible for Government House and the Secretariats, but also for most of the buildings to be erected in the new city of Delhi. With regard to the Building Act rules, ancient lights, etc., which had been mentioned, probably every house in Delhi would stand in about three acres, and there would be avenues 150 or 200 feet wide, and everything would be done on such lines that it would be a proper Garden City. He only wished they could make their Building Acts in England so that such facilities should be given.

PROFESSOR HAVERFIELD said that with regard to the point Mr. Davidge had made about there being streets in London which were streets that the Romans had walked upon, that was a matter he should like to consider. He was not inclined to believe, though he knew that Sir Lawrence Gomme differed from him in that, that there was much left of Roman London in modern London. If a Roman temple had been found under the street, it was obvious that it was not a Roman street in Roman times. He did not think it would necessarily follow that if we found some of the streets of Roman London were continued in the streets to-day, we should be making out a continuity between the London of to-day and the London of Roman times. In Carthage, in North Africa, and its neighbourhood, there were field-paths which were the field-paths laid out by Roman far-

mers, but no one supposed that the Arabs had any connection with the Romans who laid them out in the time of Julius Caesar or the Emperor Augustus. The continuity of history did not work entirely in that way. That was a problem of possible interest, but not one of very great importance. The importance of Mr. Davidge's Paper lay in the point raised by the first two speakers—viz. what was to be done with the London of the future.

SIR LAWRENCE GOMME, F.S.A., Clerk of the London County Council, said that perhaps his enjoyment of the Paper had been the greater because he had detected in the later events of the Building Acts which Mr. Davidge had described just that possible continuity between the earliest periods and the later ones which Professor Haverfield did not see. He (Sir Lawrence) put it in this way: That the Building Act in the twelfth century which succeeded the devastating fire in King Stephen's reign, having for its object the construction of stone buildings in place of the buildings which had been erected in the previous hundred years, was one of two things: it was either a direct copy from the Roman Buildings Acts, or it was a descendant of a previous tradition of Roman buildings which had come down through the custom of the city which we know was so prevalent. Apart from that point, the continuity of the building provisions in London was a very remarkable thing. One got it through the Middle Ages, one got it in the Tudor period, and, above all things, one got it in that most remarkable period after the Fire of London when London had the one chance of rebuilding itself. He liked to think that the debate on the Bill, of which we had record in the House of Commons, showed that a certain Colonel Birch described to the House of that period a plan which he would adopt if he were going to rebuild London. And he put it in this way—it is recorded in Evelyn's Diary—that London ought to consider itself as one big estate, and the rebuilding of an estate means rebuilding in a fine way, rebuilding with magnificent streets, because those magnificent streets will assist the values of the houses upon which they are built. But the selfishness of the London owners of that period was only equalled by the selfishness of the owners of the present day. They would have nothing to do with it. And the consequence was that Wren's magnificent plans were put on one side, and we had the present picture of London. But there was one bright spot in that period. When Wren took his magnificent design of St. Paul's Cathedral before the King, Charles II. did one of those very fine things which Stuart kings could do—in the midst of all their stupidities, they could do magnificent things. And King Charles II. almost anticipated the action of the Czar of Russia in saying to Wren, "That building is to be built forthwith," and St. Paul's Cathedral was built forthwith. If it had not been for the King's dictum, what would the result have been? The whole period of the Building Acts bristled with the idea of London being a great city. James I., in one

of those curious documents which he sent forth to his capital city, described how the Roman emperors wanted to make Rome a big city, and James I. was imbued with the same idea; he wanted to make London a big city. Mr. Davidge had described how that idea had come down to us; but it had never yet been actually carried out. And one felt that, somehow or other, that policy had got to be brought about before we could connect together the rights of the landowner and the benefits which would come to him when we broadened out and made London what it ought to be. He thought Mr. Davidge's Paper would refresh the minds of those who wanted to be refreshed that the periods of the past in opening up new projects and in finding those new projects never carried out would perhaps bring about a new conception of things, and would enable, if not the ratepayer, at all events some interested payer, to see that it was to his benefit and to his advantage to enlarge and make beautiful this beautiful city of ours. And he was still one of those with optimistic feelings that that sort of thing would come about in the near future.

MR. ANDREW TAYLOR [F.], Chairman of the Improvements Committee, L.C.C., said he should like to thank Mr. Davidge for his remarkably interesting Paper. He had always held that these Building Acts constitute a fascinating subject, but he could never persuade some County Council members to come into his Committee-room; and if they ever did so, he noticed they were very unhappy, and endeavoured to get out as quickly as possible. It was difficult sometimes even to get a quorum. He wanted to pay a tribute of admiration to the members of the District Surveyors' Association. They were an admirable body of men, and their lecturer that evening was a distinguished member of that body. District Surveyors were often much abused, but he had had the privilege of being Chairman of the Building Acts Committee for four years, and had come very much into contact with them, and he took this opportunity of saying that they were a body of men who were discharging their duties, often unpleasant duties, in the face of much difficulty, and doing it well, and placing their mark upon London for good; and he hoped the British public and London generally would more and more appreciate the work of the District Surveyors and what they were doing for London. He wanted to raise a note of optimism. It was the fashion nowadays to abuse London and to call it a chaotic mass of jumbled narrow streets, poor buildings, etc. He protested against that. Taking London altogether, there was no city in the world like it. There was, of course, much to be said for Paris; but one gets tired of Paris, and comes back again and again to dear old dirty smoky London, and feels that there is a fascination and a charm about it which no other city possesses. He felt tremendously that optimism, and he spoke as Chairman of the Improvements Committee of the London County Council. It was rather difficult to follow

Lord Peel in such a position, but he intended to do what he could in the way of inaugurating some new schemes for London. It was difficult, however, because they must proceed with the London ratepayer before their eyes. Probably they had all employed their juvenile efforts in improving London on paper, had made plans for transforming Trafalgar Square, Piccadilly Circus, Hyde Park Corner, and other places. But when one came face to face with the practical necessities of the case, and the spending of money, one took a different view of the matter. Those who abused the London County Council for not doing anything for London, or for doing it in the worst possible way, must bear this in mind. There were many schemes the Council had in view, and really they were doing something for London; it was improving every day. There was no finer improvement in any city he knew of than the Thames Embankment. Kingsway and Millbank were also fine improvements, and there were others coming, and as soon as the Council had the money it would be found that they were full of great schemes, and gradually the ideas would evolve and materialize. But we must not be impatient. Rome was not built in a day, neither would London be improved in a day. It was better for it to grow in beauty, gradually unfolding itself. It was coming; it might not be in our time, but we should have the consciousness and the feeling that we had done our share in improving the London which we all love.

MR. A. A. HUDSON, K.C., Chairman of the Tribunal of Appeal under the London Building Act, said that in looking at the maps Mr. Davidge had shown them, one hoped that at each period the municipality, or whatever the power was, would have stepped outside its immediate surroundings, and started a road upon land and in places where the land could be acquired cheaply. That was what they were doing in Liverpool. There they found that by going three or four miles out they could make a magnificent road, and acquire land for the purpose without going beyond a certain figure. They found that by this means they could make roads for £10,000 a mile, whereas if they were to attempt anything of the kind in the city itself the cost would be more like £200,000 a mile—quite a prohibitive price. That was one suggestion which he made, with great respect, to those who had power to carry these things out, that they should jump ahead of the times, and go so many miles out and make roads where the land was cheap. Next, he would suggest that they invest a Tribunal of Appeal, or some other body, with a little more power than they had now. At present all they had to do as a Tribunal, and all the Superintending Architect had to do, was to fix a general line of buildings—that is to say, to determine the general line of the existing buildings; whereas if the Superintending Architect were given power to fix the building line at the start it would be a totally different matter. They should not try to take the land for nothing; they must pay some compensation. It might not

be a large sum. Vast improvements would have been secured for London of the future if only they had had power to fix the building line instead of the general line. In certain comparatively small ways they could improve the inner parts of London, but he did not think it possible for them to carry out the enormous schemes sometimes proposed for the centre of London, owing to the vast expense. It was to the outside of London that they must look for great improvements. He associated himself with the other gentlemen who had thanked the reader of the Paper for his excellent contribution.

MR. EWART G. CULPIN, Secretary of the Garden Cities and Town Planning Association, said that one thing which came to notice at the District Conference held that morning was that Colonel Hellard said he had just been in consultation with a number of surveyors of the North-Eastern Section into which London was divided by the Traffic Report, and he found that the circular avenue North which was deemed practicable as the best route a few years ago was impossible now because of the building which had taken place in the last two or three years. If they were going to have these circular roads at all, it was time they did something in that direction. And as the matter had been before the minds of thinking people and dreaming people for hundreds of years, they had an opportunity now, through these District Conferences, and it was hoped that a ring road or a park belt, such as other nations had and which was their admiration and joy, might come to London, and that London in slowly unfolding itself, as had been said, might have some of those tracts of green provided. He would also like to mention the fact that Mr. Davidge would be leaving in a few weeks for Australia, to carry the gospel of town planning there. In the last three days messages had been received from practically every one of the Ministers to the different Dominions in Australasia, and from practically every important city, stating that arrangements were being made by professional men, and by committees of the various municipalities, to welcome him on his arrival there to teach them something about town planning. He was going there with the good wishes of the R.I.B.A. and other bodies interested in town planning. It was to be hoped that on the other side, where there were enormous possibilities, they would be able to avoid some of the mistakes which London had fallen into. Mr. Davidge's visit was being looked forward to eagerly, and it was understood that at least three of the Dominion Governments were proposing to make grants towards the expenses of his lectures.

MR. E. FIANDER ETHELLETS [*Hon. A.*] said that Mr. Davidge had referred to the Assize of FitzAlwyne, which was introduced in 1189, before the introduction of our present Parliamentary system.

Under that Assize any citizen could demand at the weekly hustings that the Mayor and a committee of twelve men could enforce the rules with regard to buildings. He saw in that Assize a prototype of the present Building Act Committee and their weekly meetings. With regard to the stringency of the Building Acts, they sometimes heard that this point or that point was stringent. But taking a general view of the whole of the Acts, not only those now in force, but those in the past, with the maximum penalty of forty shillings, he failed to find anything really stringent. For stringency they must go to the codes of places between London and the new Delhi referred to by Captain Swinton. Take Babylon for instance. According to the Building Laws of Babylon:

Section 229: If a builder has built a house for a man, and his work is not strong, and if the house he has built falls in and kills the householder, *that builder shall be slain.*

Section 230: If the child of the householder be killed, the child of that builder shall be slain.

Section 231: If the slave of the householder be killed, he shall give slave for slave to the householder.

Section 232: If goods have been destroyed, he shall replace all that has been destroyed, and because the house that he built was not made strong, and it has fallen in, he shall restore the fallen house out of his own personal property.

Section 233: "If a builder has built a house for a man, and his work is not done properly, and a wall shifts, then that builder shall make that wall good with his own silver."

Would not such provisions ensure safer building in London?

The CHAIRMAN (Mr. H. V. LANCHESTER) said he was particularly interested in the early part of the Paper. It reminded him of a book by a French author, whose name he had forgotten, entitled "The Dead that Speak." The theme of the book was the influence of heredity generation after generation. The striking parallels that Mr. Davidge had given them indicated the uniformity in London's manner of thought throughout the last seven centuries. In the matter of rights of light he had always felt that the recognition of those rights, which were only of gradual growth, was a mistake and not in the best interests of the community. The twelfth century was more rational in this respect. One might derive some satisfaction from the fact that in recent years these "rights" had been less stringently interpreted. Coming to Mr. Davidge's point as to the possibility of high buildings in existing narrow streets, he agreed with him that some such rule as he demanded was urgently needed. He would suggest a limiting angle of 60° from the opposite side of the street as the least that would be satisfactory. The question of street proportions came in here. With the existing maximum height no street could appear spacious unless it was at least 120 feet between the frontages. It was very interesting to note the recrudescence from time to time of the ideal of a surrounding open zone. The idea had its attractive side, but he did not feel it to

be the natural solution of the problem of London's open spaces. It was an exotic imported from elsewhere. With the varied conditions around our metropolis, the natural features of the country supplied the main factors in determining open spaces, but he had long maintained that if any general principle was to be observed, it would be that parks should radiate outwards, like Epping Forest, rather than form a closed zone. Of course, the railways now formed an important factor in the problem of outer London, and there was urgent need to devise machinery for dealing with railway enterprises in their relationship to other requirements. It was very difficult to provide for every circumstance in a series of hard-and-fast by-laws. A much better result could be achieved if cases could be intelligently considered on their merits without the restrictions of a number of hard-and-fast rules. This was, however, he presumed, too much to hope for, but at all events they should try to keep up-to-date with their regulations, which sometimes lagged several decades behind the requirements of the day. For example, the limitation of cubic contents inflicted a hardship on their business enterprises which they did not experience in any other important community, and which the insurance rates proved to be absolutely unjustifiable. There were other regulations aimed at minimising fire risks which, however well intentioned, were particularly ill-adapted to existing conditions. Again, architects would long ago have devised a satisfactory substitute better suited to this climate than the awkward and untidy shop blind, in a projecting hood glazed with refracting glass, but for the fact that they were precluded from using such a device by the regulations. He doubted if Mr. Davidge could induce anyone to re-impose the coal duties, however much such a course might appeal to the Smoke Abatement Society. The argument as to cost was, of course, a fallacious one, and he did not credit Mr. Davidge with intending it seriously. At any rate, they had

the petrol tax to take its place. The fact that Gwynn, an architect, did so much a century and a half ago towards foreshadowing the London of to-day might well encourage us in our studies for London's future. "It is part of my faith," concluded Mr. Lanchester, "that the architect's training and practice render him peculiarly well qualified for such a task, and I have great hopes that the architect will have an important share in bringing our great city into conformity with the ideals, not only of our day, but, as Mr. Davidge has shown us, of the whole extended period of her recorded history."

The vote of thanks was then put from the Chair and carried by acclamation.

Mr. DAVIDGE, in reply, said he must first express his very great appreciation of the many kind remarks that had been made with regard to the Paper. He would point out that in any scheme for the extension of London it was not necessary to spend millions immediately. What was wanted was some common-sense plan, which could be carried out slowly, as it was needed. A plan cost nothing to prepare. London already possessed the necessary powers, and could develop along that plan. Certainly a plan must be prepared for the future growth of the outskirts. He was very much interested in the point raised by Sir Lawrence Gomme and others with regard to the continuity of history, and he felt strongly that we were, after all, only working out our part of the great plan, that we were carrying on the tradition of those who had gone before us, and that those projects which had been shown on the screen, and which Mr. Lanchester and others were making now, would undoubtedly be carried out, though possibly not in our time. After all, a lifetime was but a short space in the history of a great city like London, and we must be thankful if, at any rate, we could play our part in the extension of this mighty city.

CORRESPONDENCE.

"Borrowing in Architecture."

To the Editor, JOURNAL R.I.B.A.,—

SIR,—It is with much interest that I have read the paper by Mr. March Philipps on "Borrowing in Architecture," which appears in the JOURNAL of the 28th March. It is suggestive, stimulating, and challenging; but is it convincing? I trow not. I agree with the remarks of the President, that it is another distracting contribution to the much-vexed question of the meaning of modern architecture in its relation to modern life. It would seem that Mr. Philipps has failed to grasp the true inwardness of the situation, which depends on the basal fact that architects are a part of life and conditioned by environment; and surely it would be difficult to demonstrate conclusively that art to-day has "lost touch of life," or that it has become exhausted and incompetent to deal with the problems of life, or unable to digest and assimilate the work of the past. The whole evolution of architecture, through variations of style, provides a long series of proofs that Architecture steadily reflects national ideas and needs. Heighten and quicken the life of a country and Architecture will respond. We see this if we place ourselves at the beginning of the 19th century and realise the great new, controlling conditions which then began to operate, by reason of the application of science to daily needs. Science, which had so long been the basis of research for the few, became the basis of practical life for the many; it passed out of the study and laboratory into the workshop and factory. It created a silent revolution in our midst. Steam transformed travelling and changed the ways of commerce; electricity "put a girdle round about the earth" for human intercourse; coal yielded gas for lighting, and phosphorus provided the lucifer match. No wonder that before this onslaught of applied science the foundations of all tradition were shaken so that it can never again stand in its old, unassailable position. All this national tumult and turmoil had its inevitable effect upon tradition in architecture, and ushered in a period of revivals and experiments which most of us would agree should be termed "borrowings;" but out of the chaos of undigested styles was evolved a compromise—truly English—which gave us Gothic churches and Renaissance public buildings, while dwelling-houses assumed a quiet and dignified Queen Anne and Georgian style all their own. They were the result of having assimilated, and not merely borrowed, past styles.

But surely Mr. Philipps has unduly stretched the word "borrowing" to fit his theory; so that, like an attenuated elastic band, it includes a mixed bundle of mutually destructive ideas.

Architects have inherited a great past, and just because we have entered into this heritage with all its possibilities of development there is no need for us to be "borrowers." We can spend and develop our own estate, and need borrow from none; but the one

thing needed for vitality and vigour in a national art is, that the nation should know its needs and formulate its demands; civic authorities must not be content to administer by-laws and Building Acts, but must cherish that pride of place which shall be concerned, whether for a railway station or a village hall, to have a thing of beauty, designed with regard to its functional fitness. Progressive communal life creates progressive architecture; changing purpose brings in change of treatment, which in itself tends to eliminate "borrowing" and necessitates a process of assimilation.

In many ways architecture resembles language; both have their grammar; both express national ideas, and both have been gradually evolved through the centuries. Although our speech is similar to that of Shakespeare's day, that does not prevent a certain growth which has fitted the language of to-day to the changing ideas and needs of science and civilisation. We may say that it is no more possible deliberately to invent a new architectural style than it is deliberately to invent a new language; any such attempt results in "l'art nouveau" and "cubism" in art and in "Volapuk" and "Esperanto" in language. It is the new idea that gives new life and helps the artist to develop his great estate without having recourse to usury.

The past is, indeed, a heritage which it would be folly to throw away. It is the great privilege of the architect to blend both past and present, and by passing the art of the ages through the crucible of his own personality, and fitting it to the new purpose, he produces something new which still conforms to traditional canons of art because it is the product of an unconscious process of assimilation.

BANISTER F. FLETCHER [F.].

The New Raskin—with Two Suggestions.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Courage was necessary for Mr. Philipps' breezy attack. Although he seems to appreciate that criticism is valueless unless preceded by appreciation, it is easy for a critic who is not an architect to be iconoclastic without a constructive policy. Borrowing in architecture is not only not to be deprecated, it is necessary because it is impossible to devise anything new, *i.e.* any beautiful thing. Originality does not exist otherwise. It is, moreover, just because the artist is miles ahead of his plagiarist that the Copyright Act is of no use to him.

I would suggest that the whole of the pother raised in the *Morning Post*, although excellent journalism and very readable, is based on a false premise. The assumption is that we have no style or that all styles are dead. But the fact is that Architecture, being more international than ever before (owing to the rapid transit of materials, photography, and other causes), has adopted all styles, and it is only when the vitalising spark is absent in the designer that any style may appear dead.

One danger to-day is the versatility of person-

ality. The punishment does not always fit the crime. We find green slates and tarred chimney pots on a country cottage near a Surrey village where all the old work has charming red roofs of tiles; another genius has given us oriental flavoured domes on the new Government offices; and many another anachronism might be given.

An evident danger is the confusion of eurythmy with symmetry. Following the Beaux Arts-ideal all parts must be rigidly equal. The axial lines and a pair of compasses do it all. Externally the T-square and set-square do the rest! Most architects cling to the notion that superimposed columns (as in Jones's Whitehall) and regularly divided rustications make good architecture. They spell poverty of invention. It is precisely because matters-of-taste which should be matters-of-knowledge but are not to-day that it is necessary to ask why. The answer, I venture to submit, has nothing to do with harking back to mediæval crafts, but has to do with inner vision. All the finest works of man in art have one quality in common and only one, that is a certain blitheness of expression. It matters nothing whether the style be trabeated or arcuated, old or new; if that vital essence be absent no amount of aspiring lines, of trimmings—caps, pilasters, grotesques, pinnacles, *et hoc genus omne*—will endow it with life. To some men it is easier to invest their buildings with this quality in one style than another, but that is only a matter of individuality and has nothing to do with the principle.

"History shows you men whose master-touch
Not so much modifies as makes anew;
Minds that transmute nor need restore at all."

I should say that the general level of architecture is to-day probably better than ever it has been, but that public appreciation is exactly in inverse ratio. Is it possible and feasible to educate (i.e. draw out the best that is in) the public?

(1) In 1893 I suggested that the R.A. should open the rest of the Burlington House Galleries at the time of the Old Masters Exhibition in the winter, for a representative show, each year, devoted to the Mother of the Arts, by means of models, photographs, sculpture and working drawings (perspectives of the present Academy type being excluded). I am sure that the painters would welcome another room (and invest it with charm) even though it be a cul-de-sac where the somnolent rest and eat sandwiches. The summer exhibition would then be Painting, and the winter one Special, Architecture and Sculpture.

(2) If the R.A. Council do not see their way to perform this duty to the public, and so put Architecture in its due place as the first of the Fine Arts, then it seems to me that our Institute should undertake it. The public would then have some sense of proportion shown to them, and interest in new work would gradually be awakened in such a way that even shopkeepers (as in the Italian Guilds in 1500 A.D.) would be reliable critics.—Yours faithfully,

P. A. RONSON [A].



9 CONDUIT STREET, LONDON, W., 11 April 1914.

CHRONICLE.

Exhibition of British Architecture in Paris,
13th to 23rd May 1914.

In response to a request made by the President of the French Société des Architectes diplômés, the Royal Institute of British Architects and the Architectural Association are co-operating in the work of organising the first Representative Exhibition of British Architecture to be held in Paris.

The Exhibition, which has aroused considerable interest in Paris both as evidence of the cordial relations now existing between Great Britain and France and as an introduction of British Architecture to the French public, will be held in the Old Tennis Court of the Tuileries, which has been lent to the committee by the French Government at the request of the Société.

The President of the French Republic has signified his intention of officially inaugurating the Exhibition (should political circumstances permit), and it is anticipated that he will preside at the annual banquet of the Société, which will be arranged to coincide with a special week-end visit of British architects to Paris, and to which the Presidents of the R.I.B.A. and the A.A., with several other distinguished architects, have been invited.

Owing to the exigencies of space, and at the special request of the French committee, the Exhibition will be limited to architects to whom invitations have been issued, and to executed work, but it is anticipated that within those limitations it will be fully representative of the various branches of British architecture, such as Ecclesiastical, Domestic, and Public Work; together with an Historical section so arranged as to show clearly the gradual evolution of modern British architecture, starting from about the year 1500, in the various branches enumerated above. A few selected examples of Garden Design and of Town Planning will also be included. As the Exhibition will consist very largely of perspective drawings, the committee have decided that where these have not been actually executed by the architect himself they shall be entered in the catalogue under the names both of the architect and of the draughtsman, as it is felt that this will lend an additional interest to the drawings and will set a precedent which should

remedy an injustice to many capable and brilliant draughtsmen whose work is too often ignored by the general public in exhibitions of this character.

It has been decided that Scottish and Irish architecture shall be arranged as far as practicable as separate sections on lines similar to the scheme adopted for English work; each will therefore comprise Historical, Modern, and Students' work, although modifications of this proposed scheme may be necessary later. A portion of the galleries will be devoted to holiday sketches and water-colours, which are justly much admired by our French colleagues, and the leading Architectural Schools have been asked to make a selection from the work done by students, which will also, no doubt, prove of considerable interest to French architects. A small part of the Exhibition Hall will be reserved for French students' work, and the committee of the Société des Architectes diplômés are arranging to exhibit a selection from the Exhibition which was held in the Architectural Association Galleries last year.

It is manifestly difficult to estimate the importance of an Exhibition of this character, but the committee feel that it will serve a very useful purpose in strengthening the bonds of artistic brotherhood between architects in the two countries, and lead to a juster appreciation of the high standard of architectural achievement which is a noteworthy feature of modern British architecture.

P. CART DE LAPONTAINE,
Hon. Sec. Exhibition Committee.

The New British School at Rome.

Prince Arthur of Connaught, presiding at the Second Meeting of the Council of the British School at Rome, held at St. James's Palace on the 16th ult., said that the Reports of the Executive Committee and Faculties presented to the meeting showed that much useful work had been accomplished since the Council had last met to receive their Charter of Incorporation. It was encouraging to know that during a time of transition in the life of the School there had been an increase in the number of students pursuing their studies in Rome under the auspices of the Faculty of Archaeology, History, and Letters, and that with the recent arrival of the holders of the newly established Art Scholarships the number of students during the present Session would be larger than in any previous year. He had seen the work done by competitors in the Final Examinations for the Rome Scholarships in Architecture, Sculpture, and Decorative Painting which were offered last year for the first time by the Royal Commissioners for the Exhibition of 1851, and he thought that the Faculties who administered those Scholarships might be congratulated upon the success of the first competition. His Royal Highness went on to say that one of the matters mentioned in the Report of the Faculty of Architecture must be especially gratifying to the Council—viz., the valuable Architectural Scholarship

founded by the Royal Institute of British Architects in connection with the School, the administration of which had been entrusted to the Faculty.

The Executive Committee report that their attention has been mainly directed to the question of providing suitable accommodation for the School in the Valle Giulia. Practically the whole of the £15,000 granted by the Commissioners for the Exhibition of 1851 towards the building scheme is being expended in the reconstruction in permanent material of the temporary façade of the building erected for the Rome Exhibition and afterwards presented by the Municipality of Rome for the purposes of the School. The Report goes on:—

The architect's original plan of utilising as part of his scheme the galleries of this building has been replaced by a more practical and economical design which contains all the necessary accommodation within a much smaller area, thus making free for purposes of recreation and planting a portion of the site, which the Municipality have more recently enlarged by the grant of an additional strip on the eastern boundary. The cost of carrying out the amended scheme was estimated at £35,000, and the Executive Committee decided to expend the sum of £20,000 in providing the minimum accommodation required to allow the School as soon as possible to start on its new career. The contract for this work, which includes the erection of the studio wing, the library, and the residential quarters for the Director and the necessary staff, together with temporary accommodation for a few students, has been entered into with Messrs. Humphreys, Ltd., and a Sub-Committee consisting of the Chairman, Sir Aston Webb, R.A., and Mr. Reginald Blomfield, R.A., has been appointed to advise upon matters of detail connected with the contract.

It is expected that the portion of the building now under construction will be completed by October, 1914, and that the School will be able to move into its new quarters before the expiration of its lease of the premises in the Palazzo Odescalchi.

The Faculty of Architecture* report as follows:—

The scheme for the establishment of the Rome Scholarship in Architecture offered by the Royal Commissioners for the Exhibition of 1851 has been the main subject of consideration by the Faculty. Their recommendations regarding the conditions, value, and tenure of the Scholarship were submitted to the Commissioners and received their approval on July 17th, 1912.

The Scholarship, which is open to British subjects under the age of 30, is of the value of £200 per annum, and is tenable for three years. The scheme of competition as drawn up by the Faculty in the first instance was graduated and in three stages:—(1) An Open Qualifying Examination; (2) a First Competition, open to candidates selected in the first stage, to winners of certain prizes, and to candidates nominated by certain bodies at home and abroad; and (3) a Final Competition, open to not more than 10 candidates selected from the First Competition.

The subject for the Open Qualifying Examination, which was a Private Mausoleum, had to be completed within one month. Sixteen candidates entered for this examination and eight qualified. In the First Competition there were eighteen candidates, including five of those who had qualified in the previous Examination. The subject set was a Modern Technical University, and only seven of the candidates were chosen to compete in the Final Competition, which was held *en loge*.

* The Members of the Faculty are:—Mr. Reginald Blomfield, R.A. (Chairman), Mr. W. R. Lethaby, Mr. E. L. Lutyens, A.R.A., Sir Robert S. Lorimer, A.R.S.A., Mr. Ernest Newton, A.R.A., Professor C. H. Reilly, Mr. John W. Simpson, Mr. Leonard Stokes, and Sir Aston Webb, R.A.

in London during a period of three weeks. The subject for this competition was a Modern Forum or Civic Centre.

As a result of the Final Competition the Faculty recommended Mr. Harold Chalton Bradshaw, a third-year student of the Liverpool University School of Architecture, for appointment to the Commissioners' Scholarship, and the award was publicly announced on October 25th.

The Faculty regret to report the comparatively small number of candidates for such an important Scholarship. They hope, however, that, as the scheme becomes better known among students of Architecture, the Scholarship will be much more keenly contested, and the standard of work all through the competition will inevitably rise.

With the view of facilitating the working of the competitions, especially in so far as Colonial candidates are concerned, the Faculty decided to modify the scheme for the second year and to reduce the number of stages to two, so that the Competition will in future be identical in form with those instituted by the Faculties of Sculpture and Painting.

The Faculty have recently undertaken, at the request of the Royal Institute of British Architects, the administrative control of the Jarvis Studentship, which is to be offered annually to the Student or Associate of the Institute who, in the competition for the Rome Scholarship, passes next in order to the winner.

The Studentship is of the value of £200 per annum, and is tenable for two years at the British School at Rome. The first of these Studentships was awarded to Mr. Louis de Soissons, a Canadian architect who had studied at the Royal Academy and in Paris.

The Faculty have, after careful consideration, drawn up the programme of work to be carried out by the Rome and Jarvis Scholars during their residence abroad.

The University of London School of Architecture.

The Annual Report of the University of London, University College, just issued, contains a general summary of the activities of the College. The most important events of the past year are, perhaps, the combination of the two Schools of Architecture, previously separately conducted at University and King's Colleges, under the name of the University of London School of Architecture, and the completion of the new building designed for its accommodation. This building has provision for over 100 students, and includes three large studios (50 feet square, 35 by 22 feet, 27 by 29 feet); a Museum, 50 feet square; a Cast Gallery, 48 feet by 28 feet; a Library, 35 feet by 22 feet; a Lecture Theatre, 46 feet by 28 feet, with two screens for double lanterns; a Class Room, 27 feet by 19 feet; and an Entrance Hall, 27 feet by 19 feet. There are also Private Rooms for Professors and Lecturers, a Diagram Room, Dark Room, Cloak Rooms, Lavatories, and additional rooms for new developments, which can be utilised as required. It is intended to use some of these rooms for a Department of Town Planning. The building has been beautifully fitted at the expense of and under the direction of the donor, who desires to remain anonymous.

The University College Committee will be assisted in the management and development of the new School by an Architectural Education Committee constituted as follows:—The Chancellor, the Earl of Rosebery; the Vice-Chancellor, Mr. W. P. Herringham, M.D. (Chairman); the Chairman of Convocation, Sir Edward H. Busk; the Principal of the University, Sir Henry A. Miers; Sir Herbert H.

Bartlett; Prof. S. D. Adshead [F.]; Mr. Reginald Blomfield, R.A., President R.I.B.A.; Dr. J. J. Burnet, A.R.S.A. [F.]; Prof. W. E. Dalby, F.R.S.; Mr. Ernest Newton, A.R.A. [F.]; Hon. R. C. Parsons; the Principal of King's College, Dr. Ronald M. Burrows; The Provost of University College, Mr. T. Gregory Foster; Prof. A. Schuster, F.R.S.; Prof. F. M. Simpson [F.], John Slater [F.], Prof. R. Elsey Smith [F.], Mr. Andrew T. Taylor, L.C.C. [F.], and Mr. Edward Warren, F.S.A. [F.].

The Liverpool Town Planning Conference: Report of Mr. Hastwell Grayson, R.I.B.A. Delegate.

The Conference and Exhibition organised by the Liverpool School of Town Planning was opened on Saturday the 7th March and lasted till the following Friday. Liverpool is an especially suitable centre for a conference of this character. It is famous for the activities of its Housing Committee; it is the seat of a growing Garden Suburb, created by the joint efforts of Lord Salisbury, as ground landlord, and the Co-partnership Tenants Company; and Port Sunlight, the pioneer of English Garden Cities, is only a few miles distant across the Mersey. Above all, Liverpool is the home of the only English School of Town Planning.

The Exhibition was held in the old Blue Coat School, one of the most interesting eighteenth-century buildings in the city, and the middle of a large gallery on the ground floor served for the Conference meetings. At one end of the gallery were exhibits of the Co-partnership Company, and a large model, to $\frac{1}{8}$ scale, of Port Sunlight, the latter bringing out very clearly the large proportion of land which has been given up to gardens, allotments, and open spaces. Close by was a smaller model of Bournville, and models, which could be taken to pieces, of houses and tenements. An interesting series of views and plans of the work now being carried out on the Kennington Estate of the Duchy of Cornwall was contributed by Professor Adshead. Round the Conference Hall were arranged views of old Liverpool and a large plan of the great new boulevards, averaging 120 feet wide, which encircle the town. At the other end of the room came students' designs showing how much the city would have gained if the principles of town planning had been better understood a century ago. Most interesting to surveyors and others contemplating town planning schemes were the several small galleries upstairs which were filled with great maps of actual town planning schemes, most of which have received the preliminary sanction of the Local Government Board.

The Exhibition contained much to attract the general public, and proved a mine of information for experts, especially those interested in the great schemes being carried out in Germany and the United States.

Lord Salisbury, who is one of the three great Liverpool landowners, performed the ceremony of opening

the Exhibition, and pointed out that until recently towns were largely populated by people who had been born and reared in the country, and he emphasised the necessity of giving the industrial classes, most of whom were now city-bred, better surroundings. Mr. Vivian, who followed, argued that with better housing accommodation the efficiency of the industrial classes would advance, and that in that respect housing schemes had a value that could not be represented in money terms.

Both Conference and Exhibition demonstrated that the housing element was uppermost in the minds of the promoters, and that the question of arterial roads and civic centres was comparatively subordinate. In fact town planning in England has a totally different aspect from town planning in America, where it is associated with magnificence in the centre of the city, and from abroad, where it is largely confined to arterial roads and traffic problems.

In the conferences, which were exceedingly interesting, a carefully selected chairman, after a few preliminary remarks, led the discussion point by point on the chosen topic. Perhaps Mr. Brodie, the Liverpool City Engineer, and Mr. Abbott, Clerk to the Rural District Council of Ruislip, succeeded in inspiring the most interesting discussions, on Road Making and Practical Points in Town Planning respectively.

HASTWELL GRAYSON [F.].

The Geffrye Museum of Old English Furniture.

The Geffrye Museum, Kingsland Road, Shoreditch, was formally opened to the public on the 2nd April. The building, which is an admirable specimen of early eighteenth-century work, was originally erected by Sir Robert Geffrye for his almshouses. When the inmates had to be moved to a more tranquil district the building was bought by the Peabody Trust, who proposed to demolish it and erect workmen's dwellings on the site; but the London County Council, with the assistance of the Shoreditch Borough Council and private individuals, took over the building, threw the gardens open to the public, and are converting the open space behind the building into children's playgrounds.

The County Council had been asked to establish a central museum to which students could resort, as a complement to the craft training, but it was thought that the object could be better served by a series of local museums devoted to each local trade. The Geffrye Almshouses being situated in the heart of the furniture-making industry, advantage was taken of the opportunity to acquire the buildings and adapt them as a furniture museum. Some of the exhibits are the property of the Council, the gleanings of demolished houses, while others have been lent by the Victoria and Albert Museum, the City Corporation, and private persons.

The series of small rooms is well suited for the display of the exhibits. The first room, which is devoted chiefly to ironwork, contains some old

English door-knockers and a fine seventeenth-century cast-iron window bay from Lincoln's Inn Fields. Other rooms are devoted to English furniture of different periods arranged chronologically, with the exception of one, which has some fine specimens of seventeenth-century Portuguese, Italian, and Spanish chairs. Other exhibits are carved mantelpieces, a beautiful carved desk with the arms of Oliver Cromwell, two seventeenth-century doors, one from George Street, Westminster, and the other from Horsleydown Lane, Stuart bedsteads, an Elizabethan overmantel, a seventeenth-century coffin stool, spinning wheels, and chairs. There are also stair banisters and brackets of various periods, a collection of old locks and door-handles, and a number of old insurance company signs that were erected on the houses of policy-holders.

Exhibition of Indian Paintings, Victoria and Albert Museum.

The Board of Education announce that a loan exhibition of Indian Paintings has been arranged in the Indian Section of the Victoria and Albert Museum (Lower Gallery, Room 4).

The exhibition consists of more than 200 characteristic works of the New Calcutta School, generously lent by the Indian Society of Oriental Art, Calcutta, together with examples by artists of the same school lent by Mr. Havell and Dr. Coomaraswamy. In addition, Her Majesty Queen Mary has been graciously pleased to lend an important example of the work of Abanindro Nath Tagore, for some time Principal of the Calcutta School of Art, and one of the leaders in the movement. It depicts Tissarakshita, Queen to King Asoka, contemplating the destruction of his favourite Bodhi tree. All the paintings lent by the Indian Society of Calcutta were recently shown in Paris at the 22nd Exhibition of the Société des Peintres Orientalistes Français.

The New Calcutta School represents the development which has taken place in Indian art since 1896, when Mr. E. B. Havell reorganised the instruction given in the Calcutta School of Art on Indian lines, and brought together a representative collection of examples of Indian painting, sculpture, and architecture for the purpose.

In addition to works by Mr. Tagore, there are also included in the exhibition paintings by thirteen of his pupils, Nanda Lal Bose, the late S. N. Ganguly, and others, some of whom follow the traditional technique of Indian painters more closely than the rest. Two of them, Messrs. Ishwara Prasad and K. Venkatappa, are descended from families of hereditary court painters. Mr. Prasad, whose family were court painters to the Nawabs of Murshidabad, Bengal, in the 18th century, was discovered by Mr. Havell working as a designer in Manchester piece goods for a European firm in Calcutta. He is now a teacher in the Calcutta School of Art. Mr. Gogonendra Nath Tagore, a very gifted amateur, who contributes to the exhibition a series of illustrations

of the life of Chaitanya and impressionist studies in the streets of Calcutta, has worked entirely under the tuition of Japanese artists.

The exhibition will remain open until the end of May.

English Neo-Classic Architecture.

Messrs. Batsford will publish on April 23rd Mr. A. E. Richardson's folio volume entitled *Monumental Classic Architecture in Great Britain and Ireland during the Eighteenth and Nineteenth Centuries*. The purpose of this book is to direct attention to the monumental qualities and academic aspect of English Neo-Classic architecture, which, from the period of its inception, at the beginning of the seventeenth century, until a comparatively recent date, shows a record of continuous development. It is profusely illustrated by examples from all parts of the kingdom.

The Ancient Monuments Act.

Lord Beauchamp, First Commissioner of His Majesty's Works, has appointed Mr. Harry Sirt [F.] an Inspector of Ancient Monuments in England, and to act as Secretary to the English Advisory Board established under the Act of 1913.

THE EXAMINATIONS.

The Final: Alternative Problems in Design.

The Board of Architectural Education announce that the designs submitted by the following Students who are qualifying for the Final Examination have been approved:—

SUBJECT XIII.

(a) DESIGN FOR A FIRE-PLACE.

Alison: W.	Hall: R. B.	Musmann: E. B.
Alleorn: W. J.	Hamilton: A. B.	Newbold: O.
Allen: G.	Head: G. L.	Owen: A. H.
Barford: J.	Hendry: M.	Pace: C. L.
Bennett: G.	Henshall: L. E.	Pennington: W. F.
Binnie: W. B.	Herford: T. W.	Robertson: A. W.
Bowes: R.	Hossack: J. D.	Robinson: N. S.
Brooks: C. J.	Howard: S. B.	Rose: G. A.
Butt: P.	Jacob: J. H.	Rowntree: C.
Callendar: G. W.	Jepson: H. N.	Ryan: H. A.
Charlewood: G. E.	Johnson: A. G.	Sanders: T. A.
Cheek: C. C.	Jones: W. O.	Shattock: L. H.
Ching: W. T.	Kassem: H. Z.	Shenstone: G.
Clark: C. J.	Kellock: A. D.	Silcock: A.
Cosser: G. A.	Koch: M. D.	Spence: A. T.
Davidson: G.	Langdell: G. A.	Stainsby: G. P.
Derry: D. C.	Lavender: E. C.	Stott: A. E.
Duncan: R. A.	Leadon: G. S.	Taylor: J. A. C.
Eaton: G. M.	Love: R. M.	Tebbutt: H. J.
Evans: T. C.	Loweth: S. H.	Thorpe: A.
Fincham: E.	Layken: H. M.	Threadgold: R. A.
Forbes: A.	Macgregor: J.	Triscott: H. S.
Fraser: R.	McKay: J. R.	Waleh: J. B. M.
Fyfe: J. S.	Macmillan: A. L.	Walker: D. W.
George: B.	Maddock: R. H.	Walker: H. F.
Goodwin: H. T.	Maxwell: A. E.	Whitehead: H. M.
Gossling: H. F.	Medd: H. A. N.	Williamson: F.
Graham: R. G.	Moore: R. S.	Wilson: J. F.
Grant: J. D.	Mortimer: A. L.	
Hague: H. V.	Mowat: D. G.	

(b) DESIGN FOR A FOOT BRIDGE.

Adams: W. A. C.	Dickinson: J.	Moscrop: W. N. I.
Alison: W.	Dowsett: T. W.	Palmer: J.
Andrew: H.	Farrer: J. C.	Robertson: M.
Ap-Gruffydd: C. O.	Foale: W. E.	Rose: G. A.
Armstrong: J. R.	Ford: L. S.	Stainsby: G. P.
Aslin: C. H.	Gooder: F. E.	Swallow: J. C.
Bagenal: H.	Goodwin: H. T.	Terrill: W. E. W.
Barley: F. A.	Grellier: C.	Toothill: I. C. P.
Carey: J.	Head: G. L.	White: P. G.
Carreras: E. L.	Lavender: E. C.	Woodhouse: G. H.
Cawkwell: R.	Macpherson: A. A.	Wyatt: H.
Charles: H. L.	Matthews: J. B.	
Crossland: H. E.	Moore: J.	

COMPETITIONS.

Mill Hill School Competition.

Members and Licentiates of the Royal Institute of British Architects must not take part in the above competition, because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

By Order of the Council,

IAN MACALISTER, *Secretary*.

MINUTES. XI.

At the Eleventh General Meeting (Ordinary) of the Session 1913-14, held Monday, 6th April 1914, at 8 p.m.—Present, Mr. H. V. Lanchester, *Vice-President*, in the Chair; 18 Fellows (including 5 members of the Council), 25 Associates (including 1 member of the Council), 5 Licentiates, and several visitors—the Minutes of the Meeting held 23rd March 1914, having been published in the JOURNAL, were taken as read and signed as correct.

The decease was announced of John Humphreys Jones, *Associate*, elected 1894, and Thomas McMillan, *Licentiate*.

Messrs. William Hornby Hatchard-Smith, *Associate*, and Ernest Fiander Etchells, *Hon. Associate*, attending for the first time since their election, were formally admitted by the Chairman.

The Chairman made a formal announcement of the Council's decisions under the provisions of By-law 23 with respect to a Fellow and a Licentiate of the Institute.

Mr. W. R. Davidge [A.] having read a Paper on THE DEVELOPMENT OF LONDON AND THE LONDON BUILDING ACTS, and illustrated it by lantern slides, a discussion ensued, and, on the motion of the Right Hon. Viscount Peel, M.P., Chairman of the London County Council, seconded by Captain Swinton, a vote of thanks was passed to Mr. Davidge by acclamation.

The proceedings closed at 10.35 p.m.

Books received.

The Georgian Society: Records of Eighteenth Century Domestic Architecture and Decoration in Ireland. Vol. V, with complete index to the Series Vol. I.-V. 4s. 1913. [Dublin University Press.] Selected Etchings by Piranesi. With an Introduction by Professor C. H. Reilly. Series I. 8s. Lond. 1914. 2s. 6d. [Technica Journals Ltd., Carlton House, Westminster.]

Perspective Made Easy by Means of Stereoscopic Diagrams: A Series of Drawings giving the effect of solid models illustrating the general principles of perspective. By Charles E. Benham. Price 6s. 2d. post free; stereoscope, 3s. 9d. post free. [C. E. Benham, 28 Wellesley Road, Colchester.]



PROFESSIONAL PRACTICE AND CONDUCT.

By MAX CLARKE [F.], Vice-Chairman of the Practice Standing Committee.

Read before the Royal Institute of British Architects, Monday, 20th April 1914.

IT will probably be within the recollection of members that in December 1911, two short Papers on "The Newer Responsibilities of Architects" were read at a meeting of this Institute by Mr. W. Henry White and Mr. Edward Greenop, and in June of the following year a further Paper on the same subject was read by Mr. William Woodward, this particular contribution having special reference to the case of *Minter v. Waldstein*. These Papers were arranged for by the then Practice Committee, and at a later date it was suggested that the Committee should arrange for the reading of a Paper on similar lines which would give some advice to junior members as to conducting a practice. At no time have I been a member of the Sub-Committee responsible for these arrangements, but I understand that various titles were suggested—"Professional Practice," "Guide to Professional Practice," and "Professional Practice and Conduct" being, amongst others, mentioned. This Paper was to have been read on the 6th April of the present year, but at the end of February the Sub-Committee reported to the Practice Committee that they had been unable to find anyone who would be willing to undertake the task. It then became a question as to how the vacant date should be filled up, and, foolishly, I consented to step into the breach and do what I could to fill the gap which had unfortunately occurred. Thus it comes about that I appear before you. I have nothing new to say, and anything I may say is only addressed to the junior members of the profession, who are entering upon a career which I trust will be a successful one, and if any remarks of mine assist even one member to avoid a few of the difficulties which now beset a man in practice my trouble will be amply repaid.

Naturally one must commence with a brief statement as to the necessity of the Paper; why the subject should be brought before you at all, a body of men who practise the "art of architecture," of which we have heard so much, and which Mr. W. Henry White referred to in his opening remarks in December 1911. It appears to me that the "art" of architecture is quite different from any of the other arts. If an artist carries out a work of art, say a piece of sculpture, it is generally approved in the form of a model to a small scale, which conveys a reasonable idea to the mind of a layman what the composition will be like when completed. If it should not be approved further sketches may be made without any great outlay. But it is not so with architecture; few clients really grasp what a building will be like, or how it will look, from an architectural drawing, although they may pretend to do so. The result is that while the building is in progress, or even after completion, the client wishes alterations made to make the building suit his, or her, taste, and in this way considerable sums of money are wasted and friction created between architect and client. For this I fear there is at present no remedy, as we cannot as a rule have models made of our buildings, although it would be a most desirable practice.

There is another type of alteration which more immediately concerns us—viz., the "improvements" made by the architect during the course of the execution of the building, usually in the design

and less frequently in the construction. These may be the result of an inspiration or a "happy thought" so called, and I think it is generally accepted that alterations of this nature do improve or benefit the design, as they are probably the result of more mature consideration than was given to the work in the preliminary stages. They are nevertheless a fruitful source of trouble with the employer, and generally involve "extras," which are an abomination to the mind of clients as a rule. More careful consideration given to the design in the early stages will probably obviate the necessity for alteration during the progress of the work. I suppose the really great artist can evolve that which is best at once without effort; but in the case of the ordinary mortal the evolution is fraught with much trouble and mental anguish at times, and the only remedy I can suggest to my younger brethren is not to be in too great a hurry. The world is made up nowadays of hurry, speed, or "hustle," as it is called by our transatlantic friends; a man who has the credit of being "a real hustler" is looked upon as a most gifted personage; but, take my word for it, no real work which is going to live was ever done on these lines. With regard to architecture as an art "hustle" is bad enough, but with building it is a thousand times worse; but of this more anon.

It appears to me that if I divide the remarks I have to make under certain heads it will be easier to deal with the point which I have in my mind, and as I intend my Paper to be more than usually brief I can get through it more quickly, and not bore many of you to whom the subject is not one of great interest from an artistic point of view. The sequence in obtaining and carrying out a commission is usually as follows:—

1. Receiving instructions from the client.
2. Preparing preliminary sketches.
3. Making an approximate estimate of the cost.
4. Preparing the working drawings, some details, and the specification.
5. Procuring tenders for the work.
6. Arranging a contract between the client and a builder.

I shall try and deal with these items seriatim and make a few observations and criticisms on each, and in making them you must forgive me if my views do not in many respects agree with those of my audience. We should be very tame indeed if we all thought alike, and one of the objects which I have in view in appearing before you is to elicit discussion and get different opinions. We have not enough of that sort of thing in this room, to my way of thinking.

RECEIVING INSTRUCTIONS.

Under this head one's thoughts naturally turn to the Schedule of Charges, as to which there has been considerable debate and difference of opinion of late. It is not always prudent, the moment you get into touch with a prospective client, to fire off at him a letter more or less in the form of a demand that he shall pay you a certain percentage on the cost of the work he proposes to do, either at a flat rate or on a sliding scale. Personally I am not in agreement with the Scale of which we have heard so much. It is to me quite inconsistent that an architect should get, say, $6\frac{2}{3}$ per cent. on a small house or a lych-gate, to cost, perhaps, £1,500, and the same percentage on a warehouse, factory, or the like. A house may require many drawings and details besides a comprehensive specification, the factory probably very few drawings, still fewer details, and a very brief specification. If the architect should go a step further and have steel-work and fire-resisting floors, designed either by a specialist (whom the client will have to pay), or by a merchant or other contractor who makes his own scheme and includes it in the cost of the work, the comparison becomes more absurd. The much more reasonable way to charge is on a sliding scale based upon the nature of the work as well as on the cost. I see in the *JOURNAL* of the 14th March, page 290, that such a schedule has been proposed by the American Institute of Architects. It must be recollected that the proposed Schedule of Charges of the R.I.B.A. is not, as far as I am aware at present, binding upon any of the members; but it is

not quite clear in my mind what the penalty is for those who undertake a commission at, say, 2½ per cent. on a building of ordinary class, and perhaps include the preparation of quantities in the above modest remuneration. For my own part I think *the man* should be the first consideration. Consider the case of a youth, with perhaps his first and only job, having time to do the whole of the work himself. Payment at the rate of 2½ per cent. on a £10,000 job (=£250) would be quite a good thing for him. He would probably not be able to earn more than half this sum in the time working as an assistant; but for members of the Institute who, I may say, walk on the higher planes of the World Architectural, for this same work a commission of 10 per cent. would be reasonable, and I think they ought to charge it.

One great difficulty with regard to architects' charges, is the fact that any one can call himself an architect or practise architecture, however rudimentary his knowledge, either from an artistic or a constructional point of view, and this is further accentuated by trade firms making designs for all sorts of architectural work, "free of cost" to the clients, so that they may do work free from supervision. Work done on these lines usually costs much more in the end than if a professional man is employed to design and carry out the work, and is a practice much to be deprecated, but at present I do not see how the evil can be removed; time will no doubt solve the problem. It may be that architects will combine the carrying out of the work with the designing. This has already been done in some instances, and I see no reason why it should not be both legitimate and successful from the client's point of view if carried out in a proper spirit. This is, however, a departure from the particular matter in hand, to return to which let us suppose that the architect has received the necessary instructions to enable him to proceed with the work, and that these are of a fairly definite character. By this I mean that he should ascertain the sum proposed to be spent and the size and character of the building and the amount of accommodation to be provided. It is very unwise to embark on a scheme which the architect knows cannot be provided for the amount of money which the client proposes to spend. This method of procedure is a frequent cause of friction, and often litigation. When such a case comes before a Judge and jury, the pleading invariably is that the client proposed to spend (let us say) £2,000, and the architect has designed a building the cost of which turns out to be £3,000, the client has not got the money, and the drawings are of no use to him, so why should he pay for them? To me this seems a fairly reasonable argument, so let me advise the young practitioner, and perhaps some of the older ones, to be most careful in counting the cost before it is too late.

There is a tendency for all work to increase in cost as time goes on; a building which was erected twenty years ago at a cost of perhaps £5,000 would cost considerably more to-day, it might be put down, roughly, at 20 per cent. more. Legislation, higher rates of wages, shorter hours of labour, and increase in prices of materials of all sorts have contributed to this end, and generally a sovereign has not the same purchasing power that it had; beside which ideals of living have changed. We require more comfort, more luxury, space, air, more everything, and expect to get them all at the same cost as our forefathers did, which is obviously out of the question, and the sooner we realise it the better.

PREPARATION OF PRELIMINARY SKETCHES AND APPROXIMATE ESTIMATE OF COST.

We will now consider the second and third stages of our work—viz., the Preparation of Preliminary Sketches, and an Approximate Estimate of the Cost. A man may prepare a scheme which from the architect's point of view is perfect, but does not suit the ideas of the client, and so the architect is, shall we say, vexed that he and the client do not see eye to eye, and a fresh sketch design has to be made. I mention this in view of the Scale of Charges, as it may make a considerable difference in the future whether the words "a sketch design" or "sketch designs" are used, and

for those who wish to put a hard-and-fast interpretation on the words used, it may lead to trouble on one side or the other.

PREPARATION OF WORKING DRAWINGS, DETAILS, AND SPECIFICATIONS.

I shall now presume that the sketch design has been approved and the "approximate estimate of cost by cubic measurement" has been made, and that this also meets the views of the client. This brings us to the fourth subject for our consideration—viz., making the working drawings. The architect should be careful before doing much under this head to make an inspection of the site. Do not trust to the eye that it is level. Ascertain the nature of the ground, have some trial holes dug, get the local by-laws or other requirements of the authorities, and see that as far as possible your scheme complies with them. We are very prone to leave these matters until the last, instead of making them the first consideration.

While dealing with local requirements, let me remind you of the District Surveyor, the statutory officer under the London Building Act. Some architects regard these gentlemen as so many architectural policemen, and to be carefully avoided. Let me advise the junior member not to fall into this frame of mind. The District Surveyor has to administer the law as laid down, which is at times a somewhat unpleasant duty; and unfortunately there are some men who make the architects more than usually uncomfortable; but the architect who contemplates doing work in the metropolis, if not very conversant with the London Building Act of 1894, and the many additions thereto, will do well to consult the District Surveyor in the early stages of the work. It must be borne in mind that it is no part of the duty of a District Surveyor to advise—his work is to call the attention of the builder to work done which is not in conformity with the Act—but my experience is that they are so universally courteous to any architect, giving advice and assistance whenever approached in a proper spirit, that an architect is wise in getting an opinion in the early stages, and so perhaps save trouble later on.

Study the local customs and materials; do not try to adopt methods at variance with those of the district in which you propose to build, without special reasons. Never use materials from a distance when those on the spot would answer equally well, both with regard to effect and construction.

In the preparation of working drawings it appears to me that too much is left to the imagination; a paucity of elevations, if not of architectural importance—sections with as little detail as possible shown thereon, and generally taken along the line of least resistance—foundations left entirely to speculation, and in many instances a total absence of figured dimensions. This style of drawing is more the result of habit than anything else, leaving the technical points to be decided by the quantity surveyor, the person who gets out the details, the builder or more generally his foreman. The process of finding out what is not made clear involves addition to the cost, and trouble to the architect—and sometimes to the Practice Committee as well!

Some architects consider that a specification should be as general as possible, and not go into detail. This method may have its good points, but, as before, some one has to decide the knotty points, and if it is not the architect he at once ceases to have that proper hold or grip of the work which a man in his position should have; and here, let me remind you, I am not addressing my remarks to those who have a large staff to deal with each separate item which is their individual work, but to the ordinary practitioner, say in the provinces, who has few assistants or perhaps does the bulk of the work which comes his way himself. All the same, even he has only twenty-four hours in every day, and the pressure of the present age is relentless; no sooner is some work arranged for than it is expected to be finished or at any rate well under way.

At the present time it is a very usual custom for the quantity surveyor to write the specification. This has its advantages and also disadvantages; one of the former, so far as the architect is concerned, is that it saves him the trouble and expense of doing it himself. As to whether the custom

is a good one or not, I am not prepared to give an opinion; but if the surveyor does write it, after the quantities have been prepared, the work must lose some of the individuality of the architect. The work of taking off quantities, as practised in the South of England with London as a centre, always strikes me as a matter of guesswork. In the first place the surveyor guesses what he thinks the architect means or would like, and then the detailer guesses what the surveyor has provided.

The specification, whether it be in general or precise terms, should be clear. We often forget that it is the foreman who has to deal with it and put his own interpretation on each obscure sentence. A general clause in specifications often conspicuous by its absence is one covering "extraordinary traffic," which in works of any size is sometimes a source of trouble; where large quantities of material have to be hauled over public or private roads, usually by mechanical traction, it is very destructive to the roads, and if not provided for may lead to litigation, with the possible result that the client may have to pay.

The work of the Engineering Standards Committee has been a great assistance in the simplification of descriptions of some materials, Portland cement and steel for instance. With regard to the former it will be quite sufficient to state that it is to comply with the Standard Specification, but it must be stated whether "quick," "medium," or "slow" setting cement is required.

With regard to steel be careful to define whether British or foreign manufacture is expected; and in describing bars of all sorts give the weight as well as the size.

Who shall say what should be written as a description for timber? Some years ago I wrote a letter to *The Builder* calling attention to the antiquated wording in many of the present-day specifications and inviting discussion thereon, but beyond a few letters not very much to the point nothing came of my effort. Since then I have revived the matter at the Science Standing Committee, and perhaps the result of their deliberations is before the Council. The matter was referred to in the annual report of the Institute of Builders, reported in *The Builder* of 3rd April.

In writing any description of materials the writer should consider whether it can be obtained in the ordinary course of business. If, for instance, a particular port of shipment for timber is given, the architect may be held responsible if the timber used does not come from that particular port, although equally good and suitable timber may be obtained from elsewhere.

In writing clauses relating to sub-contractors' or specialists' work care should be taken to make it clear whether the p.c. sum includes "fixing" by the sub-contractor, and whether the latter provides all the expenses connected with getting the material to the site, and who is to provide water, scaffolding, and hoisting tackle, if any of these should be required by the sub-contractor.

PROCURING TENDERS.

In procuring or inviting tenders for work the architect should, if possible, try to arrange that the firms asked to compete should be of about the same standard with regard to the quality of their work and their ability to carry out the particular building contemplated. In this, as in so many other matters usually left to the architect, careful discretion should be exercised, and no favour should be shown to one firm to the detriment of another. In this connection the architect should be particularly careful not to recommend any one firm to do the work without considering the responsibility which is involved thereby; and it is also, perhaps, unwise that an architect should invariably employ one firm of contractors, for the reason that they know his work and methods and so are able to save him trouble. The man-in-the-street is not always kind in his remarks on proceedings of this sort, often imputing motives which have no real foundation in fact.

When tenders have been invited from selected firms, I think those competing should always be notified as to the amount of the various tenders and the names of their competitors and the name of the firm selected to carry out the work. I mention this point as I know there is much diversity of opinion thereon. But when one considers the labour and expense involved in making up a tender it seems

but fair that each competitor should know the result. There is nothing to be gained by concealing the figures, and if the builders think that it is of any use to them, why should they not have the information? In my opinion it tends to fair and honourable dealing between all concerned. The more open and above-board the manner in which the business is carried on, the better will be the spirit between the parties. We are rather prone nowadays to be what is called "sharp," and we forget that any day we may meet someone who is just a little sharper.

ARRANGING THE CONTRACT BETWEEN CLIENT AND BUILDER.

Assuming that the tenders the architect has received are satisfactory and that one of them has been duly accepted, he now comes to the sixth item in our list—namely, Arranging a Contract between his Client and the Builder. In arranging a contract I need hardly remind you that the various documents should agree. Sometimes we hear of cases in the Law Courts where the specification says one thing and the articles of agreement another. In works of any magnitude for public bodies and such like, the contract will probably be prepared by a solicitor acting for the employer; in which case the architect can only advise, if he is allowed to do so. In every case the architect should be quite open with his clients, whether they be public or private ones. Conceal nothing, explain every point inquired about, and if possible make notes of interviews, explanations, and the like, to enable you to refresh your memory in case of necessity. See that all the documents relating to the contract are signed by each party, witnessed and dated, and then endorsed in the usual form.

If quantities have been prepared, it will be a question whether they should form a part of the contract. Opinions on this point are divided, some preferring a "lump sum" contract, which means that the drawings and specification taken together are the documents which form the basis of the contract and on which the architect has to rely in carrying out the work. In cases where this system is adopted the drawings and specification require to be prepared most carefully, as any item omitted from them taken together will probably be claimed as "an extra" if ordered by the architect, although it may be included in the quantities.

If, on the other hand, the quantities form part of the contract, every item provided in the bill is included in the contract, whether shown upon the drawings or not. It seems to me the latter method is the fairer one to adopt; nowadays when quantity surveying is brought to such perfection and there are so many expert and able men engaged in that profession, there is little fear of any serious omission from a bill. Of course, just as in making a set of drawings, the human element comes in and errors may possibly occur, but I think I am safe in saying that they are few and far between; and personally I prefer to risk the chance of error than rely entirely upon the drawings and specification.

In small works, quantities, I consider, tend to increase the cost, and particularly so if the work consists of alterations; but for moderately large jobs it cannot be expected that several builders can, or will, go to the expense of preparing quantities each on his own account: and builders deserve a large amount of consideration. I often think that the skill and ability, combined with rapidity and freedom from accident, with which they carry out large and sometimes most difficult problems of construction is surprising, and very greatly to their credit as a body, and architects are greatly indebted to them for valuable assistance.

THE R.I.B.A. FORM OF CONTRACT.

As the Form of Contract which is generally known as the R.I.B.A. Form is frequently used, I will now proceed to give you some of my views on that document; and I think this will be the most important part of my paper, and perhaps the portion which will receive the most criticism, but that is exactly what I am laying myself out for, as I think it is only by considering all the views advanced that the best result can be attained.

Opinions are divided at the present time as to whether the Institute Form of Contract, or, as it is called more properly, the form agreed between the Royal Institute of British Architects and the Institute of Builders in the year 1903, is all that it should be. Many people, myself amongst the number, think that it requires thorough and careful revision; indeed, I go much farther than that, as I am of opinion that an entirely new form should be prepared, to be called the R.I.B.A. Form of Contract, not in consultation with any other body. I think if this were done it would be largely used. Although it might not meet the views of some bodies in the building trade, it would be accepted by individuals in all parts of the country, and gradually take the place of the present form. It must be recollected that the employer pays, and after all it is only a question of how much he shall pay, if ridiculous conditions are inserted. It is not the object of any architect or employer to draw up a series of conditions which would be unfair to either party to those conditions; but the intention should be quite clear. The present form is not clear, being vague on many points and erroneous in some. I do not suppose, in fact I cannot imagine, that any architect worthy of the name would be desirous of cheating the builder; and, on the other hand, he does not wish the client to be cheated.

The Practice Committee have received many complaints from various parts of the country as to defects, and suggestions for the revision of various clauses in the Schedule of Conditions, and it would be most desirable that the Council should appoint a strong committee early next session to deal with the whole matter. My own opinion is that the following clauses especially require attention:—

In Clause 1 the words relating to the custody of the drawings, specification, and bills of quantities should be deleted from this clause and put in a separate one.

I object to Clause 3 very strongly. The builder should send in his quantities fully priced out at the same time that he sends in his tender. There seems to be an impression abroad that the quantities are the special property of the contractor, and for his use only. I do not consider this is, or should be, the case. The quantities are for the use of the client or his agents just as much as for the use of the contractor. There is too much ignoring of quantities amongst architects nowadays. They are the basis on which every job is settled up, whether it is dealt with by the architect personally or by a surveyor, and if the clients knew more about them and paid for them direct in place of through the contractor, I think it would be a benefit to all the parties concerned.

Clause 5 requires redrafting. For instance, I am not clear if it covers the Health Insurance payments, or whether, if no mention was made in the specification or other document as to paying fees to any authority, this clause in the contract would make the contractor liable for the payment without charging the employer any extra.

Clauses 6, 7, 8, and 9 might, in my opinion, have slight amendments made which would improve the meaning and make it clearer.

I think Clause 10 should be revised, as the architect should have access to the works at *all* times; the word "reasonable" is a mistake in this instance. It is often the time when the contractor does not want the architect on the works, that the latter finds out most about what is going on and the way the work is being done.

The clause relating to the clerk of works, No. 11, if it is necessary at all, should be added to by providing for attendance on the clerk of works, and assistance in taking particulars and dimensions, as a claim for time occupied in rendering such assistance is sometimes made in contractors' accounts.

Clause 12 should be re-drafted so as to include alteration, variation, or deviation from the drawings or specification, without necessarily involving an extra or omission. What form the exact wording should take I am not prepared to say; legal advice on the point would be necessary. Other alterations may be desirable with regard to the authorisation of extras.

With regard to Clause 13, I suppose I shall be considered by some very much behind the times,

and by others very much in advance, when I say that I think all this clause, and also Clause 14, should be revised. I was asked my opinion lately as to the position of an architect who had given a final certificate in which an amount was included for surveyor's fees for measuring the variations. The client objected to pay, not in consequence of the amount to be paid for the builder's work, but because of the amount of the surveyor's fees. The question was raised as to how far an architect could pledge his client's credit (this is what it practically comes to) for the surveyor's fees. I could not answer the question. Perhaps someone here can. The portion of Clause 17 which deals with defects in sub-contractor's work being made good by the general contractor, requires revision, as also does Clause 20 (Sub-Contractors).

The latter clause appears to me to be quite inadequate to meet the present-day requirements as to sub-contractors. It may have done very well when the Form of Contract was originally drawn up, but at the present time, when sub-contractors or "specialists" play such a large part in every contract, the clause should be drafted on entirely different lines.

The whole question of the position of sub-contractors with relation to the main contract requires consideration. As perhaps some of you may be aware, the Practice Committee have interviewed deputations of sub-contractors, who have put their views before the R.I.B.A. as to the unsatisfactory position which at the present time the sub-contractor holds in relation to the contractor and the original contract, and the payment of sub-contractors; their special grievance being the method, or want of method, of payment.

It appears to me that it is quite out of the question that the general contractor should be allowed to select the specialist. If this were conceded, there would always be the risk that a specialist quoting a low price would be employed, and inferior work put in. The question of how and when the specialist is to be paid is also a most important one. The general contractor is inclined to pay the sub-contractor promptly, so as to secure what is called a "cash discount," whereas it may be very much to the advantage of the client that a portion of the sub-contractor's money should be retained for a period to meet the expense of making good possible defects.

The employment of sub-contractors and the payment of them has been the subject of much litigation, and it appears to me that an effort should be made to clear up the present uncertainties and secure a business method of dealing with such a large and important part of any building contract. Whether we shall in future adopt the custom which prevails in the North, of a separate contract for each trade, should at any rate be considered, as it possesses some advantages over the custom in use in the South. Some contractors have an idea that six months is a sufficiently long period during which to be responsible for "defects, shrinkage, or other faults or damage," but I consider a very much longer period should be universal. If good materials and workmanship are put in there is nothing to fear, but if the reverse is the case six months' responsibility is not nearly enough. It appears to me that a summer and a winter, if not a very much longer period, should pass before the liability terminates. On this point there will, no doubt, be much diversity of opinion.

Clause 21, dealing with "Damage to Person and Property," is, of course, obsolete, and should be altered at once. The sale of the document containing this clause as it stands, creates a false security in the mind of the employer, if he knows anything of the matter, and also of the architect who may not have given the clause the attention it deserves. If it is not altered it would be advisable to delete the words "under the Workmen's Compensation Act 1897 or any amendment thereof" and put a red "sticker" on the front to the effect that anyone using the form should protect the employer against claims, by insurance or otherwise. The Practice Committee have already submitted a revision of the clause, but, as far as I know, the builders, by their Institute, do not agree to any alteration at present. If this is the case, there is all the more reason for the R.I.B.A. issuing a form of their own.

I observe in *The Builder* of the 3rd instant a report of the Annual General Meeting of the Institute

of Builders, at which reference was made to the proposal of the R.I.B.A. to revise Clauses 20 and 21. The proposal has not been regarded favourably by the Institute of Builders, their Council considering that it would be a waste of time to attempt to alter two of the clauses without discussing amendments to the form of the whole contract. In the meantime the R.I.B.A., in my opinion, should take steps to inform clients that, under the present clause, their interests are not properly safeguarded.

With regard to Clause 23, which deals with the "Date of Completion and Extension of Time," it would be interesting to have the opinion of some of those present as to whether, in the case of extra work being ordered, the architect should state before the extra work is commenced what extension of time will be allowed for this special extra work, or whether it is within his province to fix the amount of the extension at the completion of the work.

Clause 27, "Prime Cost, Meaning of," should, in my opinion, be revised, so that the amounts "for goods to be obtained and fixed by the contractor" shall be paid and expended as the architect shall direct, in a similar manner as the "provisional sums" mentioned in Clause 28; the discount for cash should be eliminated from the clause, and various other alterations made to bring the clause thoroughly up to date.

Clause 28, "Provisional Sums," requires revision in many ways; one point in it has been the subject of inquiry—viz., the meaning of the words "After allowing *pro rata* for the contractor's profits." If a pitch-pine block floor was provided, for instance, in a porch, on which the contractor put a profit of 5 per cent., and the floor was altered to an expensive marble one costing four times as much, the area remaining the same, would the contractor be entitled to four times the amount of profit? In other words, does "*pro rata*" mean, on the amount of work done, or the value of it? It would be made quite clear if some words such as "on the amount expended" were inserted after the words "*pro rata*."

I think it was in 1910 that I brought up a suggestion for revising Clauses 27 and 28, and although much valuable time has been spent in the consideration of them, nothing has been done, and they still remain most unsatisfactory and vague.

Clause 29, "Artists, etc., engaged by Employer," should be altered so as to allow the employer to engage any person he may desire to do any work for him, within the building or outside it on the site. The clause, as at present worded, seems to imply that only decorative work can be carried out without the consent of the contractor, which was never, I imagine, the original intention. I mention this as it has been raised in connection with some work of my own lately. A contract was entered into to erect a building to cost about £10,000 on an open site. The excavator's work was commenced on a particular day and carried out for the general contractor by a firm of excavating contractors. On the same day the same excavating contractor commenced similar work for my clients, being employed by them direct. There was a planked road over which the carts went to both the points at which work was being done. The general contractor made no complaint during the progress, but made a claim at completion for "hindrance," which claim I could not agree to, and, as I have no desire to be placed in a similar position again, I shall in future make it clear that the client can do any work he desires.

Clause 30, "Payment of Certificate": I am afraid I am not competent to criticise this clause. If it requires revision it must be done from a legal point of view, but architects who are commencing their career should recollect that in exercising their authority under the clause, as indeed under the whole of the contract, they must act as arbitrators; no outside influence should be allowed to weigh in the matter, a strictly impartial attitude should be maintained, and it is only by acting so that justice can be done to both parties and the intention of the contract carried out. Some architects think that because they are employed by the client they should defer to his views, or perhaps act in his favour to the detriment of the contractor. Nothing could be farther removed from the intention of the contract or the requirements of the law as to the functions of an architect.

With regard to Clause 32, "Arbitration," I have no suggestion to make beyond expressing an opinion that some scheme might be evolved which would enable redress by arbitration in small cases to be conducted on more economical lines than at present. It seems to me that in many instances it would suffice if the whole matter could be referred to an arbitrator with a simple statement of the case from each party, dispensing with witnesses or costly hearings, at which a number of persons attend for days doing nothing but listen to matters probably of no assistance to the arbitrator in coming to a decision upon the matters in dispute. Expert witnesses might often be dispensed with, their views are frequently a matter of opinion of little value in deciding the real issue.

I should like my hearers who are competent to give an opinion to say how the last two lines of the clause, which read "This submission shall be deemed to be a submission to arbitration within the meaning of the Arbitration Act 1889," apply to work done in Scotland or Ireland; as I believe the Act does not apply to either of these portions of the United Kingdom. Should not other words be used in cases where the work is situated in Scotland or Ireland and, say, all the parties to the contract are resident in one or other of these parts of the kingdom?

I trust those present will forgive me for having dealt with the present form of contract at such length, but when I was asked to read this Paper it seemed a favourable opportunity for bringing before you some of the points which will, I think, have to be dealt with in the near future, and no doubt the discussion will bring out views which may be of service to those who are entrusted with the proposed revision.

I am quite aware that my Paper does not deal with what may be called the interesting side of architecture, what some call the artistic side, but the work of an architect cannot be divested of its business routine, and the more simple and straightforward we can make the latter, the more easy it will be to carry out the multifarious duties an architect is now called upon to perform. Friction will to some extent be avoided, and architects, clients, and contractors will perhaps be able to get on without references to the Law Courts, which seem to be getting more frequent and costly as time goes on and the methods in use in the construction of an ordinary building become more complicated and the "hustle" of ordinary life more and more acute. All these things are bad for architects, bad for clients, bad for contractors, and, more than all, bad for architecture and for good building, and much to be deplored.

DISCUSSION ON MR. MAX CLARKE'S PAPER.

Mr. GEORGE HUBBARD, F.S.A., *Vice-President*, in the Chair.

MR. R. L. HARRISON (of the firm of Messrs. Waterhouse & Co., solicitors), who rose at the request of the Chairman to propose the vote of thanks, said: I have listened with very great interest to Mr. Max Clarke's Paper. One of the most interesting remarks in it was towards the end, where he spoke about business qualifications and the necessity for attention to the business side of your profession. As a lawyer, I have had some experience in these matters, and I have occasionally found that the difficulties of my clients have been accentuated by the lack of what I may call business equipment in the office of the architect. I refer to demands which are sometimes made for copies of drawings and plans. Although yours is

an artistic profession, the business side of it is a very valuable one, especially in these days. To my mind the most interesting part of the Paper was that which dealt with the much-abused Conditions of Contract. I do not think it is recognised how rapidly and how constantly changes come about which render such a document as that obsolete in a very short time. There is, in the first place, the output of legislation from Parliament. Every Session some statute is passed which will affect that document. And, in addition, there is the weekly change of the law occasioned in Lincoln's Inn by Courts of First Instance, Courts of Appeal, and the House of Lords; I am surprised that the document was not torn into shreds

years ago. Many matters, such, for instance, as the Insurance Act, may render necessary all sorts of additions, amendments, and changes. The document, as it now stands, requires very drastic revision. It may not be known to many that that document was the result of a conference between your Institute and the Institute of Builders. It was the first Form of Contract, I think, you have ever put forward in which that was the case. I remember that there were many matters of principle, and matters of phraseology, which we on our side strongly objected to, but we had to give way. And if it is to be altered, you will have to consider whether you will endeavour to get a document through which will have the *imprimatur* of the builders; or whether you will put forward your own form, drawn up in a way which you, as experienced men, consider fair and just to owner, builder and architect. My opinion, with the recollection of what we went through eighteen years ago, is that you will never get such a document approved by the builders, and it may not be worth the trouble and time to try. Before you have fairly done it you will have to begin it all over again. Therefore it may be better for your Institute to prepare your own form in your own way, and I think it will be used nearly as much as the present form was when it was more or less up to date, which it is not now. I am afraid there is no hope of our going back to the system when the architect was the arbitrator. My experience is that that was the best system. I have acted for many building owners, and I have never come across a case where I could say that the builder has been treated by the architect otherwise than in the fairest and most judicial fashion. I have been surprised at the extraordinarily high view the architect had of the equities of the case, and the feeling that he must do justice to both sides. I think that was a right and proper system, and I should like to go back to it. I have much pleasure in moving a vote of thanks to Mr. Max Clarke for his valuable Paper.

Mr. G. BOYDELL HOUGHTON, Barrister-at-law: It is a very great pleasure to me to second the vote of thanks to Mr. Max Clarke for his admirable Paper. It does not consist of mere crude ideas; it is evidently well digested and thought out. Mr. Max Clarke did not expect—it would not have been reasonable to expect—that we should all agree. I say “we,” for I venture, for the moment, to treat myself as one having some little knowledge of the subject—though I have not the honour of being an architect—and I have had a good deal to do with architectural cases, in the Law Courts and elsewhere. I claim to stand somewhere between the architect and the ordinary layman. The first thing that struck me about the Paper was that part which gives advice to the younger members of the profession, and I think you will agree with me that that advice is admirable. It does not require that one shall be an architect to be able to appreciate that that advice would commend itself to the common-sense of anyone who has considered the

subject at all; and not only the common-sense, but the sense of fairness and expediency. The part of the Paper which most appeals to me is that which deals with the existing Contract Form. I may say that the result of my experience has been to cause me to agree absolutely with Mr. Max Clarke in his condemnation of the Form of Contract in use at the present time. It is, as Mr. Harrison, in substance, said, an anachronism. Circumstances have altered, things have developed, and, for these reasons alone, it is clear that the Form of Contract should be revised. But there are other reasons, apart from the change of events, why it should be modified and seriously revised. For a long time I could not understand the genesis of some of the clauses of the existing Contract. They appeared to me not to be conceived in the interests of the building owner, and some of them seemed hardly to be conceived in the interests of the builder. I did not know then, what I have learned to-day for the first time, that this Form of Contract was the result of negotiation between the two bodies, and they were not occupying the proper relative position, because the Builders' Institute naturally—no one can blame them for it—would be fighting to get the best they could in the interests of builders. The architects had no individual interests; they were not representing the building owners or employers, but were endeavouring to discharge their functions in the spirit and in the way in which, in my experience, they have always done, so as to arrive at a fair contract between employer and contractor. And, therefore, they probably were not quite so keen in standing out for certain stipulations in the interests of the building owner as they should have been. And some of the provisions of the original Contract, which must have been inserted in the interests of the builders and which did not do full justice to the interests of building owners, have, in my experience, turned out to be of disadvantage to the builders themselves. I wish now to touch upon a vexed question, that of the Arbitration Clause. That, I have no doubt, was inserted at the instigation of the builders—very naturally. And why? Because in many of the old Forms of Contract the powers which were vested in the architect really made the contracts amount to—as I once described a contract of that kind, for it turned out to be so in that case—an abominable injustice to the builder. I said in that case: “This is nothing more nor less than a body-and-soul contract.” It was impossible for any legal human being to more completely put the contractor under the heel of the architect, in giving him no sort of appeal, under any circumstances whatever, unless he was prepared to charge the architect with fraud, and I have seldom known any progress made with a charge of that kind. But that led, of course, to going from one extreme to the other, from the extreme of that Form of Contract to the one you have now, a Form which, so far as the Arbitration Clause is concerned, is not fair to the building owner, and does not always

operate to the advantage of the builder. I will give you an instance presently. It is one thing to say the architect shall be a complete *dominus*—that is to say, that under no circumstances shall there be an appeal from him at all; that is one extreme, though I should say that that extreme is better than the substitution of power to force arbitration upon every conceivable question which arises between the builder and the owner. To my personal knowledge this clause had, in one instance, a very unfair effect as against the builder. A building owner, having spent a great deal more than he was in a position to pay, went to an astute legal adviser, accompanied also by a surveyor, and they used the Arbitration Clause in this way. The builder's account had been agreed to between the architect and the contractors. The bill of quantities had been priced after the work was done according to the Schedule of Prices, and it was practically a stated account, an account which you would say, in common fairness, ought to have been binding upon the building owner. The building owner learned what was being done, and he promptly dismissed his architect, and said: "This agreement is not binding upon me; you, the architect, have no power to bind me, and I repudiate it"; and he gave notice for arbitration. Arbitration in that case must have been enormously costly, by reason of the great detail in the case. And in the result, before that arbitration had gone very far, the contractor had to submit to a very substantial reduction, a reduction which, so far as I could judge, was very unfair. The professional advice given was: This is a moderate bill; the architect who has certified that this is due has gone into it carefully, and I do not see how it is possible in fairness to make a reduction, but you would be wise to put an end to a costly arbitration. In that case the Arbitration Clause was used for the sole purpose of keeping the builder at arm's length; and the building owner succeeded, by one device and another, in protracting the proceedings, from the time he first talked about arbitration, for nine months. And, as the sum involved was large, it was clearly a case in which the Arbitration Clause was used to the serious disadvantage of the builder.

THE CHAIRMAN: I did not quite follow your meaning. Mr. Houghton, when you said the quantities were drawn up and priced after the work was finished.

MR. HOUGHTON: They took the Bill of Quantities, and on that they worked to arrive at what each item of the builder's account should be allowed. And the quantity-surveyor and the builder, thinking they were settling and disposing of the disputed account, said they would allow so much for one item and so much for another; and it was gone through in that way. I should really have called it a bill or account stated. (A Member: "A measured account, a schedule.") One part of Mr. Max Clarke's Paper with which we must all agree is that the duty of the architect as between builder

and building owner is to be fair and impartial. I can only say, from my experience—and I am glad to hear from Mr. Harrison that it is his experience too—that architects do act in that judicial spirit in dealing with matters of this kind. In my experience I have only once come across a case in which the architect had transgressed. He had formed a personal friendship with the building owner, who had given him a great deal of work; and in that case he withheld certificates when he ought not to have done so. And the House of Lords ultimately held that he had ceased to be qualified to act as architect, and they allowed the builder to recover his claim, although he had not got a final certificate of completion or a certificate that the amount was due. That is the only case of the kind within my experience, and, of the two extremes, I would rather see—and I am speaking in the interests of building owners and builders—a reversion to the old practice of making the architect the sole arbitrator. But there are several ways in which the clause might be modified so as to deal fairly with the causes of complaint, if they do arise, between builder and architect. But to state that the Arbitration Clause should apply to every dispute is to reduce the architect altogether, in my view, to a derogatory position. He exercises his judicial faculties and does his work in a judicial spirit. All that may be set aside by a general Arbitration Clause, and that does not commend itself to the common-sense and experience of people who have had much to do with cases of this kind.

MR. F. G. RICE, the President of the Institute of Builders: On behalf of the Institute of Builders, I must thank you for the honour you have conferred upon them by inviting me to attend your conference. I thought at one time, while listening to Mr. Max Clarke's Paper, that this was no place for a builder. Still, I am glad to be here, and I hope you will allow me to make my remarks from the builder's point of view, which, I gather from Mr. Max Clarke's remarks, is what he wished. The Paper we have heard read is a most excellent one in many respects and covers a wide field of professional practice. I do not propose to refer to the whole of the points raised by Mr. Max Clarke, but I cannot help wondering which of the six items referred to in the sequence is the most interesting to the architect, and whether Item 1, "Receiving instructions from the client," is equally appreciated as Item 6, "Arranging a Contract between the client and a builder." I should like to say that the sooner the architect carries out Item 4, "Preparing working drawings and details," the more his action is appreciated by the builder, for I feel that many questions of delay and many difficulties would be solved if details were forthcoming as soon as the Contract is signed, or shortly afterwards. One thing which very much impressed me was the lecturer's reference to the need for seeing the District Surveyor as soon as the job is about to start. I think that a very important matter. The District

Surveyor could be extremely useful in dealing with questions which will facilitate the work and its smooth working. Mr. Max Clarke, at the conclusion of the Paper, spoke about business routine, and said: "The work of an architect cannot be divested of its business routine, and the more simple and straightforward we can make the latter, the more easy it will be to carry out the multifarious duties an architect is now called upon to perform." I think that phrase could be applied to the Form of Contract: the more simple and straightforward you can make it, the better it will work in practice. The Contract you now have was prepared with very great forethought by your Practice Committee some years ago, and was submitted to, and approved by, the Institute of Builders, and has since been adopted by the National Federation of Building Trade Employers, which represents the whole of the builders of the United Kingdom, whereas the Builders' Institute has not at present such a large membership. Although many country builders are members it does not represent to such a large extent the country builders as does the National Federation. This Form of Contract is issued by the joint bodies I refer to; and I think it would be not quite fair, seeing that, in the past, you have permitted builders to come to you to tell you the difficulties which they have found, and in like manner which architects have found, in carrying out the terms and provisions of the Contract, that you should now, in preparing a new form, entirely eliminate them from your conference. Architects know where the shoe pinches in the contract; builders also know where it pinches, and I take it, as has been admirably expressed by the lecturer and amplified by Mr. Houghton, that the object of the Contract is to be absolutely fair to the building owner and the builder. It seems to me that if the present difficulties are put before you, gentlemen, it will enable you to consider the matter more effectually, and you will be better able to prepare a Form of Contract which shall be free, as far as it is possible to make any legal document free, from these difficulties. The Arbitration Clause is one which was put in at the instance of the builders, and agreed to by you. I do not think it was intended by either party that this Arbitration Clause should be used, or expected that it would be used, to the detriment of either party; it should be used properly for the settlement of a dispute, for, as long as human nature is what it is, we cannot hope to get through life altogether without disputes. In this Form of Contract you have three parties mentioned—the building owner, the builder, and the architect. I say the building owner and the architect may be, and probably are, men who wish to do the right thing, and intend to do the right thing. Architects, we know, do the right things. According to the experiences referred to by Mr. Max Clarke it is the builder who does the wrong thing, and I cannot help thinking that he (Mr. Max Clarke) has been unfortunate in his builders, but perhaps he has been

engaging his client's builders to which he referred in his Paper instead of selecting them himself. But you find parties to any agreement, however honourable their intentions may be, sometimes come to differences of opinion, and it is for the purpose of properly settling them that the architect has been relieved—you will allow me to use that word "relieved"—of the settlement of these questions. You ask: Why should the architect be relieved? I reply: Because he gets his work from his client. I do not say it makes a difference to him; but the client, if the architect were to give an adverse decision against him, would say, "I do not want this architect any more, he does not stand by me." But if the architect is relieved from the position of judging on these matters in dispute he retains his client, and it is the arbitrator himself who suffers the unflattering remarks of the client in consequence of a decision having been given against him. The success of an arbitrator is measured by his inability to satisfy either side, and it seems to me that many arbitrators are very successful in that way. I would have liked to have heard more about the vexed question of the sub-contractor. I agree with Mr. Max Clarke that the sub-contractor is necessary for the carrying out of buildings in the present day, and I agree with the author that the specialist should be entirely selected by the architect; but it comes a little hard on the builder, when he takes a contract, and has got all the plant and machinery ready to do, say, the joinery work, and learns that he is to have the joinery work taken from him. I want architects to appreciate that point and that special plant costs a lot of money, and if the builder employed is able to do that class of work he should be given it to do. On the other hand, I cannot see why a builder wants to trouble about steel work. Very few builders have the organisation or equipment for carrying out steel work, and therefore I think that should be in the hands of the architect to give out. Having these sub-contractors, they have to come on our works, and then everything depends on what manner of people they are. If you are in the hands of a good builder and a good sub-contractor there is no friction; but a foreman may cause a good deal of friction, and there is the type of sub-contractor who wants to do as he likes on the works. It is to prevent friction of that sort that the sub-contract should be properly prepared, defining the rights of each party. I think that whatever new Form of Contract your Practice Committee may devise they should take into serious account the preparation of the sub-contract, that being on all fours with that of the contractor. With regard to the question of cash discount, which Mr. Max Clarke mentioned, I join issue with him on that matter. I think the builder is entitled to the cash discount, and, in most cases, I think, the sub-contractors agree with that. In some cases the architect insists on seeing the sub-contractor's account receipted before he issues his certificate to the main

contractor. Therefore, if the builder is able to finance the sub-contractor, why should he not receive a cash discount for allowing this use of his money? Why should the builder be deprived of it? There are, as I have said, three parties referred to in the Contract, the architect being one of them; and you will see the Contract provides who shall be the architect and who shall be the quantity-surveyor, and who shall adjust the accounts; and having got to the stage of adjusting the accounts, the architect having certified the job, I fail to see how in the case mentioned by Mr. Houghton, in which the architect was discharged, that could be, for the Contract provides who the architect shall be, and provides, in the event of death or dismissal, that another architect shall be appointed; but you cannot appoint an architect when a job is completed; you cannot appoint another architect when the job of the original architect is done.

MR. HOUGHTON: He discharged the architect immediately before the documents were signed, and he said that there were other architects who would give evidence.

MR. RICE: But if the Contract provides who shall be the architect, it seems to me it is clearly set out, and the architect, by his name being inserted in the Contract, becomes appointed by the building owner. And I think that is a very great reason why the building contract should be signed by the owner as well as by the builder, because he thereby confirms the appointment. With regard to the question of the period when the work should be maintained, that depends on the amount of the retention money. I do not think the builder questions how long he maintains his work, but he questions how long you keep him from his retention money; and if it is to go hand in hand with maintenance, if the period of maintenance is long, the amount of the retention money must be little. As regards clause 28, Mr. Max Clarke says: "If a pitch-pine block floor was provided, for instance, in a porch, on which the contractor put a profit of 5 per cent., and the floor was altered to an expensive marble one costing four times as much, the area remaining the same, would the contractor be entitled to four times the amount of profit?" Of course he would, in the same way as the architect receives his percentage on the extra cost. I am much obliged to you for giving me such a patient hearing. I will represent to my Council what has been said, but I would plead that when you do prepare the new Form of Contract, and when you prepare a Form of Sub-contract, which I hope you will, that you will accord the main contractors the same privileges which you have granted to sub-contractors, that you will hear them, and then you will learn from them their difficulties. For builders have many difficulties, though they try to be cheerful and show a cheerful face. And if you will allow us to put forward our case, and give the matter the consideration which I feel sure you will, you will issue Forms of Contract which will be acceptable to all parties concerned.

MR. WM. WOODWARD [F.]: I wish to thank my friend, Mr. Max Clarke, for his Paper. Mr. Max Clarke and myself were brought up in much about the same school, I think, and I thoroughly endorse all that Mr. Houghton said about his advice to the younger members of the profession, and I ask them to weigh very carefully all that Mr. Max Clarke said. And not only the younger men, but the older men too may find very substantial food for thought in the Paper. At this late hour I only propose to touch on one particular matter dealt with—viz., that where the author says: "I am of opinion that an entirely new form should be prepared, to be called the R.I.B.A. Form of Contract, not in consultation with any other body." That suggestion I think, Sir, is absolutely impossible. The Contract to-day is made between the client and the builder, and surely, if the Contract is to work satisfactorily, if the various provisions are to be carried out as between client and builder, then the builder, of all people in the world, must be a party to the conditions. The whole benefit of the Conditions of the R.I.B.A. Form of Contract consists in this: that if you propose to enter into a contract and to invite tenders, the first thing the builder says is, Are the conditions those issued by the Royal Institute? And if the answer is in the affirmative he agrees at once. Why? Because these conditions were the result of great deliberation on the part of the Builders' Institute, and of great deliberation on the part of the R.I.B.A. Practice Committee of that day, and they are also the result of a combined effort to be fair on the part of both those bodies, who are, after all, the very elements of the Contract. I am sorry to say that I differ entirely from the observations which have been made in support of Mr. Max Clarke's contention that any future Conditions of Contract should be made by one body only. I may say, without divulging private matters, that this very afternoon the Council determined that the whole of these Conditions of Contract should be referred to the Practice Committee for revision, not because of the sub-contractors only, though that is a very important matter, but because the bulk of the architects and builders many years ago determined upon a fair set of conditions, and those conditions have been upset, not by builders or architects or building owners, but by some gentleman at the Royal Courts of Justice, who puts his own interpretation upon the clauses which we have agreed upon, and which we know to be perfectly fair. Finally, I hope that this meeting will discuss this important point now that the Council have determined on the revision of these Conditions of Contract, and that they will express their opinion as to whether or not they will adopt the suggestion of Mr. Max Clarke and have these Conditions prepared by one body only, or whether those Conditions shall be assented to by the two parties who have to carry out the clauses. Apart from that, I thank Mr. Max Clarke for his most

instructive Paper; the more we read it the more we shall appreciate it and the more we shall learn from it.

SIR HENRY TANNER, C.B., I.S.O. [F.]: I have great pleasure in supporting the thanks which have been expressed to Mr. Max Clarke for his interesting and informing Paper—informing to everybody, because nobody can be too careful in preparing his specifications and drawings and making them as complete as possible before the building starts—otherwise there is sure to be trouble: that is my experience. My own view is that quantities should form part of the contract; it is the only fair thing as between client and builder. There may be mistakes on both sides, which nobody can prevent, but they can be corrected, and nobody pays for that which he does not receive. As regards the Contract itself, we at the Office of Works have our own Contract, and I know practically nothing about the Institute Contract, therefore I can offer no remarks upon it. Every contract has its weaknesses, and you are always finding there is something that has not been provided for. Therefore, although these Contracts can be amended from time to time, one cannot expect to make them perfect throughout for all time. I think that is the great difficulty; it is too much trouble to go all over this Form of Contract and bring it up to date; so it is amended to meet, as one may say, the last accident which happened. So far as the Institute is concerned, it seems to me that it ought to have a Standing Committee whose function should be to keep the Contract Form reasonably up to date and make it meet all the contingencies which are likely to happen, because they could do it better than anybody else. We at the Office of Works have tried to do it, but I do not know that we have always succeeded. We always find that an opening has been left, and the builders' claims get larger and larger in proportion. But I much doubt whether we shall ever succeed in making contracts perfect.

Mr. BLANCO WHITE, Barrister-at-law: So far as I have been able to see from outside, a good deal of the trouble seems to arise from the fact that the architect is necessarily an artist—and an artist, I suppose, requires a certain amount of artistic detachment. But a building is not like a picture. If a man bought one of the pictures that adorn these walls to-night, I suppose he would pay some twenty or thirty pounds for it, and if he did not like it he would put the picture aside, and there would be an end of the matter. But when a man has a house built, it is a much larger thing in proportion to his means, and consequently he criticises it much more; and if the architect and the builder are not careful, the matter is apt to end in litigation, in the way that purely artistic matters never do. So that the architect is in the position that he alone among artists has to bring to bear the businesslike method, and, I suppose, from lack of that businesslikeness a lot of trouble ensues. As an example, we had

Nos. 1 to 6 in proper sequence in Mr. Max Clarke's Paper; and No. 7 is Supervision. All architects supervise, but some of them do not keep an entry of the fact in their diary, and, in the absence of that, if there is trouble there is only one man's word against another's. But if an entry had been made in the diary, things would have been quite otherwise. And one comes to this cynical reflection, that in matters of business to-day you cannot in reality treat other people as though they were gentlemen; you have to act on the assumption that though 19 out of 20 are gentlemen, the 20th will not act as one. Hence you must be forearmed, and wherever you go, and whatever you inspect, you must make an entry recording it; and when you order an extra, you must do it in writing.

With regard to Mr. Max Clarke's remarks concerning the Schedule of Charges, it seems to me that anyone connected with the Royal Institute of British Architects is in a fairly safe position with regard to these charges if he is reasonably cautious, because either he can say nothing about his charges, then something on his notepaper or somewhere will reveal the fact that he is connected with the Institute, and he will send in his bill according to the Institute's scale, and as he is entitled to be paid a reasonable remuneration, he will be paid that: or if the client asks his charges, he can say, and there is no trouble. The only time there is trouble is when he is asked and, through diffidence or some natural shyness, fails to say clearly what his charges really will amount to. He may, for instance, say his charges are 5 per cent. on the cost of the work, and forget to say anything about travelling expenses. It is only where he blunders in this way that there is likely to be trouble about his charges, and then it is, to some extent, his own fault. With regard to the Royal Institute Form of Contract, I have great sympathy with all who have anything to do with the drafting of a contract like that under discussion. I have occasionally criticised clauses to myself and said they were too long and ought to be shorter, but the result of my attempts at abbreviation has been that they ended about twice as long as they were originally. And the conclusion I have come to is, that either you must make up your mind to leave a good deal unsaid in the Contract—you must either have short sentences summarising the chief relations legally and leave many gaps—or you must have a very long and very full Contract. If the present Form of Contract falls between two stools at all it is in its endeavour to make it clear to all who read what the result of the Contract will be. If you have a short Contract, there are a lot of decisions connected with the subject, and probably any architect reading an elementary legal handbook on the subject would be able to say what the effect of the Contract is. But if an architect is not content to rely on the law as it is, he has got to fill his contract in, and it has got to meet all contingencies. Thus it must be a very long and intricate affair.

With regard to whether the builder should come in or not, I feel this, that this Contract, necessarily, is largely a matter of compromise. One cannot assume—and it would not be right to assume—that the builder's point of view is the same as the architect's. It is not. The architect's point of view must largely be that of the client for whom he works; and if a building goes smoothly I do not think it matters what is in the Contract. The importance of the Contract is in the case of an unexpected struggle, in case of risks, events which have been unforeseen, which mean a loss to someone. The builder says, "I was only charging a fair percentage, and it is only fair that the employer should bear that loss." The employer says, "I was building a house at a certain price; it is unfortunate that these disturbances, which I do not understand, should take place, but I ought not to be responsible for that," and so, from the employer's point of view, the risks should be thrown on the builder. Therefore the Contract must be a compromise between the two. So it appears to me that any Contract drafted without the co-operation of the builders, drafted by the architects alone, must necessarily, though unconsciously, tend to be an unfair Contract, because the architect will say, "So and so may possibly happen, and we must provide against that." And the builder who foresees difficulties says, "I must provide against them." What the builder means is that he must ensure getting fair payment for the work he has done, and what the architect means, looking at it from the point of view of his employer, is that the employer should get a fair return for his money. Therefore, for the Form of Contract to be fair, I agree with Mr. Woodward that the builders should come in; the two must be considered, otherwise you will have a one-sided Contract, one which will be convenient to the architect and his employer, but which the builder will distrust and refuse to enter into. Now, one or two observations on the present Contract as it is. First, as to Clause 12, dealing with extras. That appears to me to require revision, because at the present time it only provides for variation by addition or omission, and not for varying by alteration, which is neither addition nor omission. Anyone with common-sense would say, Naturally an alteration is either an omission or an addition, or a combination of the two. But, unfortunately, a long time ago there was decided a well-known case, *R. v. Peto*, and it was this: The surveyor had power to add or omit, and the builder, under the direction of the surveyor, put in rubbish instead of putting in brick. And a very high Court, the Court of Exchequer, decided that the particular clause did not give power to the surveyor to order that alteration under the head of an omission and an addition. Of course, that may be an irrational decision, but it is an old saying that hard cases make bad law; and this may be an instance of bad law. At all events, it is a standing decision, and therefore the clause ought to take account of

it. And again, with regard to the question of the ordering of extras. It says the builder shall be paid for an extra if it is properly ordered, and proper ordering shall be sufficiently proved by any writing under the hand of the architect. It does not say the writing has got to be executed before the extra is done; so if an architect orders an extra verbally, and a week afterwards refuses to ratify it in writing, the builder is in the hands of the architect, whom he has obeyed when he gave the order. In 99 out of 100 cases, of course, the architect will act properly, but why should the right of a builder to be paid, through an unhappy drafting of a clause, depend in the 100th case on the caprice of the architect or on a difficult point of law. The architect, when asked to ratify his verbal order, may say, "I would have done it before, but now a dispute has arisen I do not like to interfere"; and that is a position which an architect might think proper to take up. And unless the builder can satisfy the Judge that he is not limited to the method of proof mentioned in the clause, he will not get paid for that extra. You may say that my interpretation of the clause is wrong. Even if it is, it is a possible interpretation, and the builder's rights should not be dependent on the interpretation of a clause. In other words, the clause should say whether extras are to be ordered in writing or not. There are other small points on Clause 26, and the Arbitration Clause. It says an arbitration is not to be opened until after the building is completed—and no doubt for very good reasons. Suppose, as happened in a case I came across, the surveyor gave notice to proceed with the works quite unreasonably, and because the builder did not comply with it wrongfully and improperly forfeited all the builder's plant. The builder's rights were by the arbitration clause forfeited. He was a small man, and he was deprived of his means of livelihood, and with no remedy until this building was completed by the employer and the surveyor, over whom he had no control whatever. That surely is most unfair and unsatisfactory, and shows there are instances in which this Form of Contract does act unfairly to the builder in an unintended way. No one would probably think of such a case when drafting, or of such forfeiting taking place. And is it likely that these injustices will be properly remedied unless builders are called into consultation when the redrafting takes place? The people who most vividly remember the injustices to builders are the builders themselves; and if you want to find out where the Contract has in the past been unjust to builders, it is the builders who should be asked. Therefore, with all deference, I suggest that you cannot have a proper Contract unless the builders are consulted on the matter; and that it will not be used as it ought to be unless builders agree to it. But, after all, to prevent misconception, I would add that I have come across cases, especially small cases, where people with small experience have drawn Contracts on their own, and they have been

surprisingly bad Contracts; and it is true that if a large number of people sit down and criticise the R.I.B.A. Form of Contract they can find faults and say this and that should be altered, and they may agree with Mr. Harrison that it should be brought up-to-date. But, unless he be a man of large practice and much experience, such as Mr. Max Clarke, an architect will do well to adhere to the R.I.B.A. Form as it is at present, until such time as he feels he has sufficient confidence to draft one for himself free from imperfections. There have been many decisions on this form, and its imperfections are known, and people also know what it means.

Mr. EDWARD GREENOP [F.]: I also wish to thank Mr. Max Clarke. The Practice Committee were asked to arrange this evening, and the question was: Who was to do the work? In the net result Mr. Max Clarke let himself in for it. But we are none the less grateful to him for having come to deliver it to us. I am sorry he dropped the other half of the title—Conduct, because the discussion has turned on the Building Contract, upon which we can talk for ever. But it has given us an opportunity of getting into touch with legal points of view—for instance, Mr. Harrison's, who has probably had more to do with this building contract than anybody in this room. It is very instructive to get him here, and I should like to see a draft building contract drawn up by Mr. Harrison. I am very glad to have heard Mr. Blanco White too; Mr. Houghton also, whom we have not previously had the pleasure of meeting. I do not propose to go into details at this late hour; there is a vast deal on which I differ from what has been said. I have lived with this Building Contract, as Honorary Secretary and as member of the Practice Committee, for 13 years, and have heard pretty well all there is to be said for and against it. I agree with Mr. Blanco White that this is the best thing for the young architect to follow until he can get something better. It has the advantage of being a precedent, and cases have been tried upon it. Directly you begin to draw up your own contract, you are in this position: the client says, "What sort of a contract have I got?" If you say, "It is something I have drawn up myself," look at the responsibility. But if it is one drawn up by the Institute it relieves you of that responsibility.

THE CHAIRMAN, in putting the vote of thanks, said he had made many notes during the Paper and discussion, but as it was so very late he would not detain the meeting by referring to them. He might mention that Mr. Harrison had had much to do with the drawing up of the present Form of Contract. At

the time that document was drafted it was a very good Contract, and though they criticised it to-day, it must be remembered that the faults arose from the altered conditions during the progress of time. He disagreed very emphatically from Mr. Max Clarke's proposal that a Form of Contract should be drawn up by the Institute independently altogether of the Institute of Builders.

Mr. MAX CLARKE, in reply, said: It is a worry, first of all, to read a Paper, and then it is a worry to hear the criticisms. But, taken all round, I think the criticisms have been rather favourable to me. I never suggested that the young architect should prepare his own contract; that never entered my mind for a moment. The young man who did such a thing would be an utter idiot. The Form which we have got may be bad, but at the present moment we have nothing better. And if a man is young and inexperienced, he would know nothing about the subject, and the only thing he could do would be to copy some other form. And if he copied any other than the Institute Form, he would probably copy a worse one, unless he took Sir Henry Tanner's; he might make a success of that. I was prompted to make this suggestion as to the Institute making its own Form from reading the report in the building papers as to what happened at the Institute of Builders. I may be quite wrong in coming to the conclusion that the Institute of Builders are desirous of having a form of sub-contract, and until they get that form settled with the R.I.B.A. they do not intend to proceed with the main Contract. That was the impression which that report conveyed to me. As a matter of fact, the R.I.B.A. have nothing to do with the form of sub-contract between the builders and the sub-contractors—I am speaking of a contract entered into between the builder and his sub-contractor. Rightly or wrongly, whatever happens between the builder and his sub-contractor is entirely a matter between those two parties. Whatever may happen as to a sub-contract entered into between the general contractor and the man I will call a specialist, who is forced down the throat of the builder, that is another matter altogether, and I have not dealt with that. The gentleman who was going to criticise the shortcomings of my Paper had to go earlier in the evening. When I commenced, I had intended to deal with Clause 7, Supervision of the Work, Clause 8, the Issuing of Certificates, Clause 9, the Settlement of Accounts on Completion. Nobody can deny that they are three of the most important clauses which I could have dealt with. Some day, if you like, I will tell you all I know about those.



THE KING'S INNS, DUBLIN. James Gandon, Architect.

REVIEWS.

ENGLISH NEO-CLASSIC ARCHITECTURE.

Monumental Classic Architecture in Great Britain and Ireland during the XVIIIth and XIXth Centuries By A. E. Richardson (F.). Illustrated in a Series of Photographs specially taken by E. Dockree and Measured Drawings of the more important Neo-Classic Buildings, with Descriptive Text. Fo. Lond. 1914. Four Guineas net. [B. T. Batsford, 94 High Holborn.]

The appearance of Mr. Richardson's book is an event of real importance for our national architecture, and it is happy in the moment of its advent upon the scene. For, on the one hand, the trend of architectural thought for the past twenty or thirty years has been such that the way has been prepared for the reception of its gospel, and, on the other, it will constitute a wholesome corrective to the recrudescence of Ruskinianism which is noticeable in certain quarters, and which owes its success with the public as much to the general ignorance of the principles and aims of the Classical Tradition as to the literary charm and the plausibility with which it is presented.

The Neo-Ruskinian School has advanced a step beyond the views of its great protagonist. It no longer advocates the revival of an extinct stage of our national architecture, nor the importation of an exotic style, say from the shores of the Adriatic. Mr. Richardson's splendidly illustrated volume will prove to any who may be inclined to doubt or forget it, that we have a native tradition whose flame has never been extinguished though its brightness may have been dimmed, and which only needs fuel and tending to burst into renewed brilliance.

To our amateur advisers, whose acquaintance with architecture is an external and not a practical one, the Classic basis of our tradition is always a

stone of stumbling, and, to a school of criticism conducted on lines of pure reason, divorced from the necessities of design, nothing appears easier than to evolve a new style out of ferro-concrete and sanitary science. The literary critic of architects is always in a hurry; he is impatient of the slow evolution necessary to art, of its long periods of gestation. He complains, for instance, that Rome borrowed irrelevant details from Greece, and could not digest them; and ignores the fact that, if the West required five centuries for the process of digestion, protracted to a millennium by the barbarian invasions, the final blossoming of Gothic, even in its most characteristic manifestations, owes much to the elements originally borrowed from Greece. To go a step farther back—who knows, even in these days of indefatigable archaeology, how many centuries of patient labour and imperceptible improvements, how many borrowings from Crete, Egypt, or Assyria, went to the making of the crowning glories of the Athenian Acropolis?

If at certain favoured epochs architecture has appeared to be endowed with accelerated powers of growth and has advanced by leaps from triumph to triumph, it is by reason of conditions spiritual, social, or economic, which it is beyond the power of humanity to produce by taking thought, and not least by reason of the long period of apparent sluggishness, but in reality of fruitful brooding, which preceded them.

One of the conditions of progress and of great achievement in architecture has usually been the existence of a vernacular style with which all the workers from highest to lowest, as well as the public, were more or less familiar in their various degrees. The individual architect was thus not distracted by the necessity for the choice of a language in which to express himself; still less was he called upon

to invent one. He expressed current ideas naturally in the terms learnt from his father or master, adapting, refashioning, and recombining them for the new requirements that arose from time to time, while not disdaining to enrich his vocabulary as occasion required by borrowings from other lands.

It is only when such borrowings are made on a large scale that there is a danger of their proving indigestible. This was the case with the grafting of the Northern Gothic on to Central Italian Romanesque, where, meeting no felt want, it was sloughed off as soon as the native classic had been reinvigorated by the genius of Brunelleschi and his contemporaries. On the other hand, if a stylistic importation is to take root, it must be because it satisfies a need, and in that case only will it pass from the region of pedantic jargon to vernacular use. If ever this came to pass it was in connection with the great innovations introduced by Inigo Jones and established in public favour by Wren, for there probably never was a period when an architectural style was more ingrained, not merely in professional practice, but in the habits of the building trades and the taste of the lay public, than was the Classic of the eighteenth century.

It is useless to speculate over might-have-beens. It is as idle to wail over the failure of our splendid Tudor architecture to resist foreign influences and adapt itself to modern needs, as to deplore the waxing or the waning of the Gothic Revival. These things have come to pass and we must make the best of it. Inigo Jones's revolution succeeded because it satisfied national requirements in so many ways. The need was felt for breadth and concentration, for good detail instead of bad, for systematic instead of haphazard composition, for the monumental in architecture, which the Jacobeans, with all their verve and charm, had not succeeded in achieving. Its success was assured and its value enhanced, as Mr. Richardson so well points out, because it provided once more an academic standard of taste, by reference to which the value of performance might be gauged and the dangers of provincialism avoided, a standard which since the age of the great cathedrals had been lacking in England.

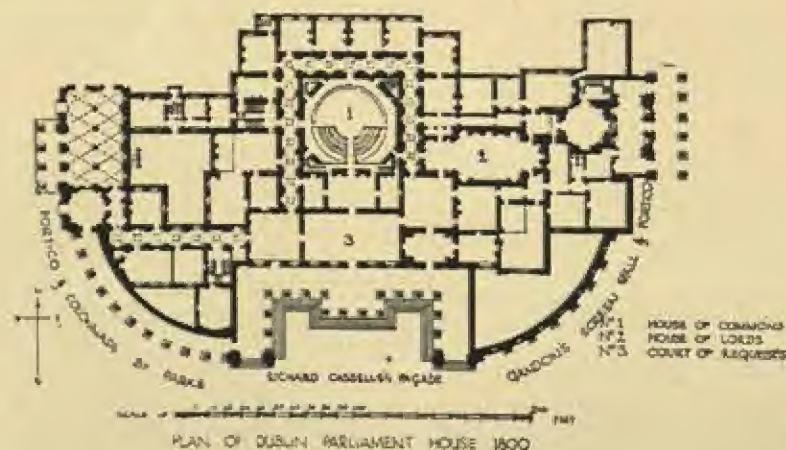
One of the chief benefits conferred by Mr. Richardson's work—"monumental" in more senses than one—is to prove the vitality of the tradition initiated by Jones and consolidated by Wren, and to remind those of us who may have forgotten it, that it continued unbroken side by side with and in spite of the Gothic irruption of the last century, till the very moment when Norman Shaw and others, many of whom are still with us, were feeling their way slowly but surely from the Neo-Gothic of their youth, *via* Jacobean and Queen Anne, once more round to "Monumental Classic." The two streams have thus coalesced in our own day, the sadly debilitated academic tradition and a Neo-Classic movement painfully freeing itself from provincialisms.

If the results are not as yet all that they might be, nor a knowledge of Classic principles as widespread as may be wished, it is small wonder. Fifty years of romanticism have confused the issues, disturbed the fine traditions of scholarship, and too often concentrated attention on irrelevancies of detail and prettiness of features, so that even now it is often through non-essentials that we approach the Classic. But many conditions are now favourable to progress. The sound teaching now given in most of our schools, and the influence of the newly formed "atelier," if it lays that stress on fine planning and general principles of composition which have always been so strong a point with the French, will do much to restore an academic standard. And if our literary friends will give us time—a generation or two may not be too much to rescue our Classic vernacular from provincialism—we shall be ready to give architectural treatment to all constructive or other problems that may arise, for we shall have a language to express ourselves in. Individual efforts to invent original architecture have invariably ended in disaster, as we have had too many proofs in our own day.

The Classic architect of the future will assuredly not undervalue craftsmanship, as is often rashly assumed. For its decay in the past the rise of Classic and of architects was in no way responsible—these phenomena were all symptomatic results of the same far-reaching causes. Rather architects will be the first to give a sympathetic welcome to its revival. Neither will they aim at perpetuating until the crack of doom stereotyped features and rigid rules. They will value first of all composition and rhythm, and they will mould and refine and vary their features, ornament and detail, as occasion arises, not neglecting the study of the best models of other lands and ages. In this connection there is a point that comes out very clearly from Mr. Richardson's pages, and that is the extraordinary pliability of our Classic tradition: its power of adapting itself to varying conditions and to give monumental expression to each; its willingness to learn and borrow from the most various sources; its power of assimilation and its power of sacrifice. One of the stock weapons of attack in the hands of the traducers of Classic architecture is its use of the Orders, but nothing is more interesting to observe in Mr. Richardson's illustrations than the appropriateness with which in many cases columns are confined to positions where there can be no possible objection to their employment, such as porches, loggias, and screens, or for internal support, or subdivision. There is much to be said for their use merely for the purpose of giving vertical emphasis or enriching a cardinal feature, but, if at all costs we must dispense with them, again let us be given time, and when we are masters of our vernacular we shall invent substitutes, or rather substitutes will grow up of themselves, out of existing elements. Again, our author gives us many good examples of the fine results

obtainable by an astylar architecture where the undying element in the theory of the Orders is a vivifying, if latent, principle in the design. Could anything be more appropriate, both practically and

If the services which *Monumental Classic Architecture* may render to the cause of our national architectural development are very great, from the point of view of historical studies it is no less valuable



THE PARLIAMENT HOUSE, DUBLIN: INTERIOR VIEW. Richard Cassells, Architect.

aesthetically, than Barry's Reform Club! And was not Dance's Newgate—alas! no more—"one of the most imaginative structures in the whole history of English architecture"? Both yet contain the quintessence of academic classicism.

It completes, in a measure, the historical survey of the Classic tradition in England contained in that splendid series which we owe to the House of Batsford, and to which Messrs. Garner and Stratton, Gotch, Belcher and Macartney have contributed in so

masterly a manner; and, in doing so, it will throw much light into obscure corners and will correct hasty and partial estimates both of the duration and continuity of that tradition and of the value of its later stages. It has been too generally assumed that we had Wren, *et præterea nihil*. Many of us were brought up

or, as someone has said in these pages, by "a mild breath from Athens."

We have now for the first time something sounder and surer to go upon. We can see all the phases in their proper perspective and relations. The greater lights are relieved of the bushel of oblivion which in



Photo: E. Dockree.

ROYAL COLLEGE OF PHYSICIANS, QUEEN STREET, EDINBURGH.
Thomas Hamilton, R.S.A., Architect, 1845.

in the doctrine that he was followed merely by the "baroque theatricality" of Vanbrugh and the "pedantry" of Lord Burlington's circle, while the admitted vigour of Chambers and somewhat attenuated grace of Adam were to be regarded as more or less isolated phenomena in a belated aftermath, soon to be swept out of sight by the Gothic Revival,

too many cases has extinguished their radiance, and even minor luminaries are placed on a candlestick where they may shed such mild glow as they are capable of. This eminence, it must be admitted, is in one or two cases rather more than the little flicker will bear. It was, for instance, somewhat a shock to the present writer to be called upon to admire

the railway station at Cambridge, which had always appeared to him a peculiarly dreary affair. Perhaps, however, this impression was partly due to a

Another design surely unworthy of eulogy is the deplorable Corn Exchange at Leeds, which mingles one of the worst conceits of the Italian Renaissance



THE BANK OF ENGLAND, BRISTOL. C. R. Cockerell, R.A., Architect.

melancholy association of ideas, the façade in question only becoming obvious as one was leaving the beloved city. It is well to be reminded of the duty of gratitude for small mercies. We do not always get a design at all for a railway station.

with others equally unfortunate of no recognisable school.

Such works—the reverse of the medal—are, however, in a very small minority, and throw into relief by contrast the fine qualities of the great

majority of buildings illustrated and commented upon. They testify at any rate to the care with which the author has investigated the side streams, and even the backwaters, as well as the main current of the movement. The information collected about the careers of the lesser-known architects, and the attention devoted to work in the provinces and in the sister kingdoms of Scotland and Ireland, much of it little known outside its own districts, are notable and useful features of the work.

Mr. Richardson renders a lasting service in reducing a vast mass of work, extending over some two centuries and of very varying character, to an intelligible sequence of phases, and in carefully exploring and discussing the affiliation and formative influences of each. His classification is clear and convincing, and brushes away many obscurities. In what he terms the Roman Palladian Phase (1730-80), extending from Wren's immediate successors to the younger Dance, he describes the result upon design, still carried on within the Palladian framework, of a closer and wider study of Roman monuments under the stimulus of amateur enthusiasms, such as those of Lord Burlington and the Society of Dilettanti. In this phase the traces of Louis XIV. influence disappear, and a general refining process is at work eliminating coarse mouldings, excessive rustication, brutal key-blocks and swags of aldermanic proportions, and fining down detail, a process of which the altered proportions of the sash bar is symptomatic. The work of Robert Adam, which carries this tendency to extremes, as viewed by Mr. Richardson, and no doubt rightly, was less affected by his brief visit to Spalato, as has usually been represented, than by his studies of Roman remains in Italy and of certain Italian masters, in particular the somewhat obscure Coner, whose sketch-book—now in the Soane Museum and formerly in Adam's possession—contains suggestions for several of his favourite devices. The influence of the Greek studies is as yet but faint, and confined only to producing a more reticent detail and supplying a few ornamental motives, such as the palmette. The Adam decorative style is shown to be no isolated phenomenon, but having independent parallels in the work of contemporaries, as, for instance, in that of Sir Robert Taylor at the Bank of England, or of James Wyatt at our own R.I.B.A. premises. While the bolder influence of Roman monumental ideas, suggested by Baalbek and Palmyra, especially in the domain of grouping and axial planning, is not lost even upon Adam—generally the representation of attenuated ornamentation—and comes out as strongly in his Edinburgh University. It is paramount with his greater contemporary, Sir William Chambers, and his school, including Gandon, the creator of monumental Dublin, while on the decorative side the group leans rather to the lead of Gabriel and Neufforge than to the Greeks.

In the succeeding or Græco-Roman Phase (1780-1820) the effects of Stuart and Revett's researches

in Greece become more pronounced. There is more unmistakable use of definitely Greek detail and of Greek Orders, though Palladian composition is still the rule. The chapter dealing with this interesting stage of development naturally covers the period of the Regency, and full justice is done to that much misunderstood and unjustly slighted architect John Nash, who, if careless and trivial in his detail, displayed powers of varied and satisfying composition and of effective town planning of nearly the highest order. Alas, but little of the charm he imparted to Regent Street remains to us, and to the next generation it will be a thing of the past!

It is only in Mr. Richardson's third phase (1820-40) that the Greek fashion is for a time supreme, and that, yielding largely to amateur and literary pressure, the architects of the day abandon in some measure the wholesome Palladian system to introduce entire Greek features and, so far as was possible, Greek types of composition, often with results by no means so unsatisfactory as might have been expected. Thomas Hamilton's High School, at Edinburgh, for instance, is, as Mr. Richardson points out, a work of great imagination and extraordinary monumental value. Greek buildings, other than temples, are, however, too scarce to be of wide utility as models, and Greek forms were used for the clothing of schemes which, even in the height of the Greek fashion, remained more in accordance with Western tradition. For instance, the beautiful, though often thoughtlessly derided, steeple of St. Pancras Church is merely a Wren motive clothed in Hellenic dress, while Hamilton's Royal College of Physicians, at Edinburgh, is an essentially modern composition if its exquisitely refined attire is of semi-Athenian cut.

The Greek mode was as brief as it was intense, and the fourth or Neo-Grec and Italian Phase corrected its excesses. It was soon recognised that Greek architecture does not readily export unadulterated to our shores, and that even in the greatest triumphs of the Greek Revival there is an inevitable element of coldness. The temperature of our monumental design was once more raised by a new and salutary bath of Italian sunshine combined with fruitful intercourse with the French Neo-Grec movement. We thus find Cockerell casting the results of his Greek studies into a Palladian mould in those scholarly compositions the Branch Banks of England at Bristol, Liverpool, and Manchester; we find Harvey Lonsdale Elmes, who had studied the work of Schinkel and Klenze, composing his unapproached masterpiece of St. George's Hall, Liverpool, on rich and stately Roman lines; and Burton, Barry, and Penne-
thorne turning to the hitherto unutilised inspiration of Florentine Renaissance in the Athenæum, Reform, and Travellers' Clubs, and the Jermyn Street Geological Museum. Thus, for more than two centuries of its existence in these Isles, the Classic Tradition was never stagnant, but constantly refreshed and revived by foreign travel and study. New material, as it

became available from time to time, was constantly thrown with the old into the crucible and cast into English moulds of abiding beauty.

But in the moment of this great culmination the Classic Tradition was no longer without a rival. The excesses in one direction of the Greek fashion were to be more than atoned by a violent swing of the pendulum in an opposite one. The impulse of a far more vigorous literary and ecclesiastical counter campaign had re-established the reign of the Goths, and the Middle Ages were—for a time—in the ascendant. That, in the domains of ecclesiastical and perhaps collegiate and domestic architecture, the mediævalists achieved notable successes none will deny, and few will be found to disparage their acknowledged triumphs—but it would be difficult to point to a single really satisfying example of monumental civic design produced by that school, with the exception of the Houses of Parliament, which, in spite of Pugin's garnishing, is largely Classic in conception, notably as regards its axial planning and the composition of the river front. So strong was the current that even the Classic leaders were forced in self-defence to bow before it, and to speak with two voices, till one could not tell which was the true and which the assumed. Their ambidexterity—as Mr. Richardson happily expresses it—was their undoing. The whole-hearted Goths were preferred to them, and won a victory—their last—in the new Law Courts.

Yet even in the Neo-Gothic period the ruling fashion did not have it all its own way, and Sir Gilbert Scott found himself obliged by Governmental opinion to transpose his Foreign Office into a Classic key. Moreover, the great harvest of the 'forties and 'fifties was not without its worthy aftercrop in such works of the old school as John Gibson's National Provincial Bank, Threadneedle Street (1863); Edward I'Anson's School of Medicine, St. Bartholomew's (1883); or James Hibbert's Harris Library at Preston, finished so late as 1896, thus overlapping the Classic Revival in the younger school.

Mr. Richardson's fine book is written in a vivid and far from banal style, and inspired by an enthusiasm which cannot fail to be catching. It deserves to be widely studied, and cannot fail to give food for serious thought, even in the quarters most opposed to his point of view. Its illustrations are beyond praise, both for their judicious selection and for their beauty. They will call attention to many works whose merits have been forgotten or unsuspected.

Of the perfection in all respects of the get-up of the volume there is no need to speak. Mr. Batsford has but one standard—the best. This review may well close with congratulations to both author and publisher on the conclusion of a long and arduous task, and the expression of a hope that the benefit which it confers upon architectural studies may meet with wide recognition.

W. H. WARD [A.].

GLASGOW CATHEDRAL AND MALVERN PRIORY.

A Short Account of Great Malvern Priory Church: A History of the Monastery and Description of the Fabric, with a Chapter on the Ancient Glass and Tiles. By the Rev. Anthony Charles Deane, M.A. With 42 illustrations. 80. Lond. 1914. 1s. 6d. net. [George Bell & Sons, Limited, York House, Portugal Street, W.C.]

The Cathedral Church of Glasgow: A Description of its Fabric and a Brief History of the Archiepiscopal See. [Bell's Cathedral Series.] By P. Macgregor Chalmers. 80. Lond. 1914. 1s. 6d. net. [George Bell & Sons, Limited.]

We are glad to welcome two more volumes in this useful series; one on Malvern Priory Church, the other on Glasgow Cathedral. The first is by Canon Deane, who was for five years vicar of the church, and has produced the first critical and authoritative account of its history and structure. There seems to have been some sort of religious house here before the Conquest, for in one of the windows is an excellent representation, labelled *Sanctus Eduardus Rex*, of the Confessor presenting a sealed charter to a kneeling ecclesiastic. It would seem, however, that it was not definitely founded as a Benedictine priory till 1085, when Aldwin became the first prior. To this date Canon Deane assigns the nave on the ground of the plain and archaic character of the nave arcade. But arches of two or three unmoulded square-edged orders occur in the West of England till the middle of the twelfth century or later; nor is it likely that a church whose chancel was only begun after 1085 would reach its nave before the twelfth century. The writer gives data showing that in plan the Norman chancel was periapsidal with radiating chapels, which adds another example of this plan to the long list already collected by myself; it is a plan peculiarly characteristic of the Norman work of the West of England.

In some way, not clearly known, the house became dependent on Westminster Abbey, and remained so till the Suppression, when the church was sold to the parish of Malvern for £20, say £240 of our money; the lead, however, had previously been stripped off the roof and the bells sold; these two were always the most valuable items in Cromwell's sales. The priory was under a sort of double control; for while it was directly dependent on the Abbot and Convent of Westminster, which was far away, it was also subject, like all the religious houses in his diocese, to the visitatorial authority of the Bishop of Worcester, who was near at hand. As a rule, by playing off one authority against the other, the priory managed to retain a large measure of independence. But in 1282 the Malvern convent deposed a very debauched abbot and elected William of Wykewane in his place. The latter, with certain officers of the convent, proceeded to Westminster to get confirmation of his election, but the abbot threw them all into prison. William appealed to the Bishop of Worcester and the Archbishop of Canterbury; the deposed prior was

backed by the Abbot of Westminster and the king. The Pope was appealed to, and all sorts of eminences. Meanwhile William remained in gaol till the usual English compromise was arrived at. On the one hand, the Bishop of Worcester was appeased by being given a manor at the expense of Malvern priory; on the other hand, he abjured for ever all jurisdiction over the priory; the debauched prior returned to his honours and emoluments, William of Wykewane was released from prison, and the authority of the Abbot of Westminster was vindicated; in fact, everybody got something out of the business except the worthy William.

The historical account of the priory given by Canon Deane is the result of much careful research, and is of great value. In the architectural description of the church he recognises that the fifteenth century design of the choir is but a new version of that of Gloucester choir, while the tower is little more than a replica in two stories of that of Gloucester; as the latter was built between 1450 and 1457, that of Malvern must have been a contemporary work, possibly of the same architect. It is a pity that the author should not have extended his comparative view further, so as to include Sherborne and Christchurch, both of which are of the Gloucester type. Indeed, a monograph on the late Gloucester school of masons is badly wanted. Among the illustrations are two measured drawings and a pre-restoration view of the chancel. The photographs are of varying merit; some are mere black smudges, and nearly all those of the interesting and beautiful stained glass are worthless, owing to smallness of scale. Neither amateurs nor professionals should attempt to photograph stained glass unless they employ colour screens and have the necessary technical experience. That it can be accomplished, and most successfully, may be seen in the work of Mr. W. Marriott Dodson, of Bettws-y-Coed.

Mr. Chalmers has had in some respects an easier, in some respects a more difficult task. In writing of Malvern Priory Canon Deane had little to help him except a collection of singularly worthless local guide-books; whereas very important monographs have been written on Glasgow Cathedral; it would have enhanced the value of his work if Mr. Chalmers had given us a list of these. On the other hand, the architectural history of Malvern Priory Church is fairly straightforward; but that of Glasgow Cathedral presents a crowd of architectural puzzles, some of which, in spite of all the literature they have called forth, must still be regarded as unsolved.

Glasgow, like St. Albans, is connected with the earliest days of British Christianity. The Scotch saint, S. Ninian, after a training at Rome, returned to his country *via* Tours, where he made the acquaintance of the great S. Martin (*ob.* A.D. 397), and not improbably brought from that centre of Gallican Christianity Roman masons to build the stone church

which he is reputed to have erected at Whithorn, in Galloway, dedicating it to his friend S. Martin. In his mission tour he is recorded to have stayed at Glasgow, and there to have consecrated a Christian cemetery. But with the departure of the Roman legions, anarchy and paganism overwhelmed British Christianity. It was not till the sixth century that the evangelisation of Western Scotland was taken in hand, this time by S. Kentigern, the disciple of S. Serf, who called him "Mungo," "Dear One." When twenty-five, on a journey he came across an aged man, S. Fergus, and on his death carried the body on a wain to Glasgow, where the burial took place, probably in S. Ninian's cemetery. Here S. Kentigern or Mungo built a church—the first Glasgow cathedral. S. Fergus was buried in the open churchyard, and round his grave there had grown in the twelfth century "a delicious density of overshadowing trees in witness of the sanctity and reverence of the place." On this spot, which is a few yards south of the south transept of the cathedral, there was commenced in the thirteenth century a two-storied chapel, not finished till the beginning of the sixteenth century, on whose vault is carved a human figure prone on a two-wheeled wain, with the inscription *THIS IS YE ILE OF CAR FERGUS*. S. Kentigern's cathedral was no doubt succeeded by others, but of these we have no record till we come to the Norman cathedral—we may call it the second cathedral—consecrated in 1136; of this no fragment has been discovered. The third period comprises the building of a small crypt by Bishop Jocelyn, dedicated in 1197, a small fragment of which remains. In the fourth period, that of Bishop Walter, 1208–1232, more work is done in the crypt. In the fifth period, that of Bishop Bondington, 1233–1258, a great eastern extension and rebuilding took place; to this belongs the greater part of the present vast crypt and the chancel above. The nave was probably completed by Bishop Robert Wischard, 1271–1316. The last great building period was that of Archbishop Blackader, 1483–1508, to whom is due some of the finest work in the cathedral, including the crypt of the Fergus Chapel and the stone screen. Such, omitting a great deal, is an account of the complex building operations of which the present cathedral is the summing up.

Setting aside the archbishop's work, where, as at Melrose, Continental influence is clearly visible, the crypt, chancel, and nave of Glasgow Cathedral are solid, good English work. The internal elevation of the choir reminds one distinctly of that of Lincoln choir, less detached marble shafts; that of the nave just as unmistakeably of Pershore Abbey and Christchurch Cathedral, Dublin; in all three the clerestory absorbs or seems to absorb the triforium arcade; the treatment at Glasgow is the finest of the three. In plan the crypt and chancel, Mr. Chalmers tells us, copy Salisbury. This can hardly be so. Salisbury has a projecting eastern chapel; Glasgow has not.

The affinity of the Glasgow plan is rather with that of the abbeys of Dore and Fountains.

On the whole Mr. Chalmers' architectural history is careful, detailed and accurate. We demur, however, to his table of dimensions; in no case does he state whether he refers to internal or external length or breadth; the height from floor to roof (of what part of the church?) he says is 59 feet 6 inches; does he mean up to the ridge of the roof or to the wall-plate? We cannot follow him when he says that "the painted glass windows"—Munich glass of 1850 to 1864—"supply a welcome note of colour to the cathedral"; they are atrocities. The illustrations include four plans and five elevations and sections; several of the photographs, especially those of the crypts, are excellent; three very murky ones are Mr. Chalmers' own work; one of these is most successful if it is intended to depict the blackness of desolation, in which the city of Glasgow is felt rather than seen; it is supposed to be the exterior of the Cathedral from the east. An interesting note is given and a facsimile of the monumental tablet of the great architect of Archbishop Blackader, John Morow of Paris, who was responsible for all the masonwork of the High Church of St. Andrews, of Glasgow, Melrose and Paisley, Nithsdale and Galloway—a mediæval Scott or Pearson.

FRANCIS BOND [*Hon. A.*].

BUILDING SUPERVISION.

Building Supervision. By Geo. W. Grey, Licentiate R.I.B.A. 8m. 8s. Lond. 1913. Price 2s. 6d. net. [*E. & F. N. Spon, Ltd., 57 Haymarket.*]

This book, although primarily written for the information of clerks of works, may be studied with advantage by young architects, and more particularly by those whose experience has not included a period of daily contact with the actual work. Being the outcome of personal observation, it is the more valuable. However fortunate we may usually be in the class of contractors who carry out our designs, very few there are who at some time or other will not have the misfortune to deal with a contractor whose work and workmen require close supervision. There are many books which tell us how work should be done, but this is one of the few which tell us also how it should not be done, and in building operations, as in other matters, "Prevention is better than cure." If we are acquainted with the short cuts and sharp practices resorted to by unscrupulous contractors or their men, we are in a better position to arrange the specification and supervision to forestall such practices. Many examples of these shortcomings are mentioned, and if carefully noted would often save architects considerable trouble.

The author suggests that the possibility of misinterpretation of the specification may be prevented by making that document quite definite, and two of the examples given well illustrate this point. The proportion of lime in lime mortar should be stated to

refer to the lime before slaking; and the description of concrete—six parts stone, two parts sand, and one part cement—must not be misconstrued into eight parts of ballast with the sand left in, to one part cement.

Another preventive measure is discussed, and that is the protection of work executed. Although the terms of the contract may state that all damage is to be made good, at the end of a job this is often found impracticable, for time as well as other reasons, and the result is that the damaged portion is merely patched up.

A point fortunately brought forward is the far-reaching effect of alterations to the work once it has been commenced. The draughtsman, with a light-hearted sweep of his rubber, erases the past and with a few strokes of his pencil installs the new, never for a moment considering that this effort will possibly involve the quantity surveyor in hours of toil, that the foreman has already made his setting-out plan, figured in every detail, ordered his material, and arranged the hundred-and-one matters which are directly or indirectly affected by such alterations. There is nothing more aggravating to a foreman than constant alterations.

The author draws attention to the necessity of close supervision of the work, and points out the frequent failings of the various tradesmen.

The chapter on drainage shows that the water and smoke tests in themselves are insufficient, and that although the drain may have stood these tests admirably, the presence of brickbats, &c., in the drain will only be detected by rodding at completion or by stoppage at a later date.

Rhodesia.

J. REGINALD HOBSON.

CORRESPONDENCE.

"Borrowing in Architecture."

To the Editor, JOURNAL R.I.B.A.,—

In looking over Mr. March Phillipps's Paper, read before the Royal Institute on March 23rd and published in the JOURNAL of March 28th, I find several points on which it may be useful to offer a few remarks. I think Mr. Phillipps's argument that in living art there can be no borrowing, in the sense of taking things from foreign sources and using them just as they are, is entirely sound. But it seems to me that some more concrete illustration of the way in which things are changed in the process of architectural evolution may further elucidate the subject.

A work of art is an organism, and as in every living organism each part is shaped for its function in that particular organism, it follows that no part of any given organism can be suitable for any other. Thus in living art what is taken over is subjected to creative modifications, from largest things to smallest, so that the original elements become, as Mr. Phillipps

says, entirely new. We see this in the first creative architecture of the Middle Ages—namely, the Byzantine. In the church of St. Sophia of Constantinople, where this architecture assumes its finest character, what may be called the Byzantine order stands forth, in the great arcades of the ground story, in its highest perfection. The capital of this order is wholly unlike any ancient capital, and yet it shows clearly a derivation from ancient sources. The new form is adapted to an arched system of construction, for which the capitals of the Classic orders were not intended and are not suited. If we examine this capital closely we see that it is cunningly made up of elements derived from all three of the Greek orders, creatively fused together into a new member of admirable efficiency and great beauty. A short analysis will make this clear.

The function of a capital in such arched construction is to prepare the comparatively slender round column to carry a more or less bulky square load. In order that it may do this it must have height enough to give it a considerably spreading form, and it must have an abacus of great strength, large enough to take the bulky mass to be gathered on it. Accordingly the bell of this capital is high, and this is the Corinthian element in its composition; the abacus is thick and square, which is the Doric element; and the volutes on the inner and outer faces, together with their connecting bolsters, are the Ionic elements. None of these parts retain the Classic forms. The bell has a bulging outline, suggesting that of the ovolo of the Greek Doric capital, instead of the concave form of the Corinthian bell—a form which gives it an increased expression of strength; the abacus is bevelled to increase the spread without overhanging the bell on the under side; and the volutes, with their bolsters, are made smaller and less salient than those of the Greek Ionic order, to give the member as a whole a more compact form appropriate to its new function. I think this capital is particularly noteworthy as showing how the genius of the Greeks themselves—for it was primarily the Greek genius that presided over Byzantine building—rationally recast the older forms when confronted with conditions for which those forms were not fitted; and it well illustrates what I conceive to be true architectural assimilation. This rational creative spirit is manifest in all progressive mediæval architecture, and it reaches its finest expression in the pure Gothic art of the Ile de France in the late twelfth and early thirteenth centuries.

Compare this re-creative composition with what we find in the so-called Composite capital of Imperial Roman art. In this member, as it occurs, for instance, in the Arch of Titus, a practically unmodified Ionic capital is set on the lower part of a Corinthian capital, with no material change in either part. The combination arises out of no necessity. It is a mere *pasticcio*, the like of which has no parallel in any living art.

As to what is known as Neo-Classic architecture, Mr. Philipps is, I think, entirely right in proclaiming it an art of lifeless borrowings. The advocates of this art uphold it on the ground that it is an expression of modern life, with its inheritance of Classic tradition. It is indeed an expression of a limited phase of modern life—since whatever men do must, of necessity, express the life by which they are animated; but this does not make it a praiseworthy art. Whether an art be worthy of praise or the reverse depends, I conceive, on the quality of the life of which it is an outcome and expression. What is the quality of the life that gives rise to Neo-Classic architecture? In order to find a complete answer to this question we must look back to the life that gave rise to the architecture of the Italian Renaissance, from which our Neo-Classic art had its origin. Every student of history knows that this life, notwithstanding its brilliant intellectual and artistic activity, was corrupt beyond almost anything that we know of in the modern world. It was entirely mundane at best, and to a very great extent it was given over to the worship of the world, the flesh, and the devil. This is plain historical fact, of which it is enough to peruse the pages of Villari's *Life of Machiavelli* to be convinced.* It was in high places that the evil life of the Renaissance chiefly prevailed, and it is significant that Renaissance architecture, like that of Imperial Rome, was an architecture of the upper classes of society exclusively. It was for the gratification of the great in worldly power and influence that this art was called into being. The patrons were the Medici, the Borgias, and their like.

The life of England in the seventeenth century, when Neo-Classic art here took form, was not, indeed, so degraded; but the spirit that gave rise to its architecture is plainly written in the art itself. It is an art shaped for the pleasure of the wealthy upper classes, having no root in unsophisticated English life. It was animated by a grandiose spirit, as the writings of the time, as well as the art itself, abundantly show. One needs only to glance at the remarks on the design for the Sheldonian Theatre in Oxford, in Wren's *Parentalia*, to perceive this. We are there told that this building would have "been executed in a greater and better style, with a view to the ancient Roman grandeur discernible in the Theatre of Marcellus at Rome, but that he (Wren) was obliged to put a stop to the bolder strokes of his pencil and confine the expense within the limits of a private purse."† Thus its animating spirit is one of pomp and plagiarism, a spirit that is foreign to the inspiration of noble art.

To maintain that Neo-Classic architecture follows Classic tradition by copying ancient forms according to the rules of Palladio and Vignola appears to me

* I have discussed this more fully in my *Character of Renaissance Architecture*.

† *Parentalia*, p. 335.

shortsighted. Genuine Classic influence finds expression in later art after the Byzantine and Gothic manner, not by servile copyings and capricious travesties of ancient forms. Creative traditional influence is incompatible with Neo-Classic design, and therefore I believe that modern architecture can make no progress until it frees itself from imitation of the Classic orders.

On one or two points Mr. Phillipps's remarks seem to me not enough considered. He speaks (p. 308) of construction as practically constituting architecture. If this were true the baldest mechanical engineering would be architecture. True architecture is, indeed, founded on construction; but it is very much more than construction: it is the art of shaping, arranging, and even of more or less clothing, structural elements so as to produce harmony and beauty.

Nor do I think Mr. Phillipps right in maintaining that concrete is good building material. A material that must be used with Roman massiveness, or else be reinforced with iron, can hardly be called good. Concrete may, indeed, be cast into blocks, and built up with mortar, like cut stone; but it has not the beauty of natural stone, for which it is at best only a cheap substitute. Even for engineering works it is not really good. I have heard an engineer say that the best bridge that can be built to-day is a bridge of stone masonry, and certainly a work in natural stone is more grateful to the eye than anything in concrete can be. Fancy the Aqueduct at Segovia, of which Mr. Phillipps gives an illustration, replaced by one of concrete!

The use of concrete did the Romans little credit as architects. They used it because it was cheap and could be worked by unskilled labourers; but they were careful to mask it with a covering of better materials.

CHARLES H. MOORE [*Hon. A.*]

Books received.

Monumental Classic Architecture in Great Britain and Ireland during the XVIIIth and XIXth Centuries. By A. E. Richardson (F.). Illustrated in a Series of Photographs specially taken by E. Dockree and Measured Drawings of the more important Neo-Classic Buildings, with Descriptive Text. Pp. Lond. 1914. 24 4s. net. [B. T. Batsford, 94 High Holborn.]

Papers on the Effect of Smoke on Building Materials. Edited by Raymond C. Bonner, Ph.D., Bulletin No. 6. [University of Pittsburgh, Pittsburg, Pa., U.S.A.]

Stencils and Stencilling for all Purposes, Artistic and Decorative. By Arthur Louis Duthie. "The Decorator" Series of Practical Books, No. 10. So. Lond. 1914. Price 3s. [The Trade Paper Publishing Co., Ltd., 345 Birkbeck Chambers, High Holborn, W.C.]

Building By-laws in Rural Districts. By Sir William Chance, Bart., M.A. So. Lond. 1914. Price 1s. 6d. cloth, 1s. paper covers. [P. S. King & Son, Orchard House, Westminster.]

Trade Publications.

Ferro-Concrete: A Monthly Review of Monchel-Hennsbiqun Construction. Publishing Office: 24 Bride Lane, Fleet Street, E.C.

Art Metal Work of All Descriptions. [Robert Adams, Manufacturer and Patentee, 3 and 5 Emerald Street, Holborn, W.C.]

Cinema Notes: Electrical Equipment of Cinema Theatres. With Government Rules and Orders. [British Westinghouse Electric and Manufacturing Co., Ltd., 179 Wardour Street, W.]

Everything Electrical for Cinemas, Theatres and Public Buildings Generally. [British Westinghouse Electric and Manufacturing Co.] The Record of Faithful Service—1 July 1913 to 1 January 1914. Milners' Safe Co., Ltd., Milners' Buildings, Finsbury Pavement.



9 CONDUIT STREET, LONDON, W., 25 April 1914

CHRONICLE.

Council Nomination List, 1914-15.

Members are aware that it was the intention of the Council to nominate Mr. Reginald Blomfield, R.A., to serve as President for a third year, and that for this purpose they obtained the assent of members to a resolution suspending By-law 28. At the Council meeting on Monday, April 20th, the President felt it his duty to announce, with very great regret, that for reasons of health he would be unable to accept the nomination. An illness at the beginning of the year has been followed by another at Easter, which convinced him that if he continued to discharge the duties of the Presidency for another year it would involve serious risk of a breakdown, with the result that he would be unable to carry through a third year of office as President. Under these circumstances he considered it his duty to decline the nomination.

With reference to the error in the Council Nomination List issued a few days ago, in which Mr. Ernest Newton appears to be nominated to two positions, it has to be explained that the original list with Mr. Blomfield's nomination as President was on the point of being printed when his decision not to stand again became known, and in making various changes in the list necessitated by this circumstance it was omitted to remove Mr. Newton's name from the Ordinary Members of Council, to which he had originally been nominated. The following is the correct list:—

PRESIDENT.—Ernest Newton, A.R.A.

VICE-PRESIDENTS.—A. W. S. Cross, J. A. Gotsch, F.S.A., George Hubbard, F.S.A., H. V. Lanchester.

HON. SECRETARY.—E. Guy Dawber.

MEMBERS OF COUNCIL.—H. Percy Adams, H. V. Ashley, Walter Cave, Edwin Cooper, H. P. Burke Downing, Ernest Flint, Wm. A. Forsyth, W. Curtis Green, Henry T. Haro, E. Vincent Harris, Gerald Horsley, Arthur Keen, T. Geoffry Lucas, G. Herbert Oatley, D. Barclay Niven, Alex. N. Paterson, A.R.S.A., C. Stanley Peach, Sydney Perks, F.S.A., C. H. B. Quennell, W. E. Riley, H. D. Searles-Wood, Walter Tapper, Andrew T. Taylor, Edward P. Warren, F.S.A., Paul Waterhouse, Percy S. Worthington.

ASSOCIATE-MEMBERS OF COUNCIL.—Robert Atkinson, W. B. Davidge, G. Leonard Elkington, K. Gammell, Edwin Gurn, E. Stanley Hall, Herbert Shepherd, Leo Sylvester Sullivan, S. Douglas Topley, Philip E. Webb, Herbert A. Welch.

PAST PRESIDENTS.—Reginald Blomfield, R.A., Leonard Stokes.

REPRESENTATIVES OF ALLIED SOCIETIES.—Graham C. Awdry (Bristol Society), R. Burtis Dick (Northern Association), F. B. Dunkerley (Manchester Society), A. F. Watson (Sheffield Society), John Watson (Glasgow Institute), Glendinning Moxham (South Wales Institute).

REPRESENTATIVE OF ARCHITECTURAL ASSOCIATION.—H. Austen Hall.

The Civic Exhibition, Ireland, 1914 : Competition for Designs for the Improvement and Extension of Dublin.

The Executive Committee of the Civic Exhibition, which is to be held in Dublin during the summer of this year, are promoting a competition for a premium of £500 which has been offered by the Lord Lieutenant of Ireland for the best design of a Plan for the improvement and extension of Dublin. A descriptive Report must accompany the design and be provided with a summary of its main conclusions, recommendations, and estimates. The Committee state that they are not as yet in a position to foresee the requirements and future development of Dublin with sufficient definiteness to justify them in promising to recommend for execution any of the Town Plans which may be submitted. Their object is rather to elicit Plans and Reports of a preliminary and suggestive character, and thus to obtain contributions and alternatives which may be of value towards the guidance of the future development of the city in its various directions. The assessors will give credit for suggestions of interest as well as for solutions of value. The area to be considered, which may be described as "Greater Dublin," includes not only the adjacent townships of Pembroke and Rathmines, but as ranging from Howth to Kingstown and Dalkey inclusive, and from Glasnevin and Ashtown to Dundrum. The schemes are to be treated as far as possible under the following main headings:—(a) Communications; (b) Housing, Central and Suburban; (c) Metropolitan Improvements. The conditions of competition have been drawn up by the Technical and Advisory Committee of the Housing and Town Planning Association of Ireland, with the expert advice of Professor Patrick Geddes, of Edinburgh, and Mr. John Nolen, D.Sc., of Cambridge, Mass. These two gentlemen will also, by request of the Lord Lieutenant of Ireland, act as adjudicators, together with Mr. Charles McCarthy, Fellow of the Royal Institute of Architects of Ireland, City Architect of Dublin. After adjudication the Designs and Reports may be exhibited in the Civic Exhibition or elsewhere under the auspices of the Committee. The premiated Design and Report are to become the property of the Housing and Town Planning Association of Ireland without further payment, and will be deposited in its collections for reference, and for such further exhibition as its Council may at any time decide. The Association, it is stated, is also willing to preserve for reference or exhibition the originals or copies of designs awarded honourable mention by the adjudicators, and will lay them, along with the premiated design, before the City Corpora-

tion and the Government, with the recommendation that in the event of any plan or suggestion being selected for execution this should be arranged for with the designer. Among the instructions to competitors is a recommendation that in the rebuilt town quarters not more than 100 persons should be housed in one acre, nor more than 60 persons in the suburbs, while attention is called to the necessity of the provision of open spaces, playgrounds, and gardens wherever possible. It is also stated that consideration should be given to the removal to the country or the suburbs of such institutions as have been built round and are now in unsuitable localities. In regard to metropolitan improvements it is suggested that special notice should be taken of the opportunities of improvement in the quays, bridges, and approaches of the Liffey. "The sea front should be considered and the views and accesses towards hills and mountains kept in mind." It is stipulated that those entering the competition must forward the sum of One Guinea to the Secretary of the Competition, which will be applied towards the cost of supplying various books, maps, etc., to intending candidates. A copy of the conditions is to be seen in the R.I.B.A. Library. Inquiries should be addressed to the Secretary, Town Planning Competition, Civic Exhibition, Linenhall Buildings, Dublin.

The Preservation of St. Paul's.

The Ecclesiastical Commissioners have decided to give to the St. Paul's Cathedral Preservation Fund a tenth part (up to £7,000) of the money expended on the work of preservation. Canon Alexander, the Treasurer of St. Paul's, has stated, in reply to inquiries, that the work on the fabric has already begun, but by far the most critical question was that of dealing with the main supports of the Dome, especially with the piers on the south side of it; and this was so delicate a matter, and so costly even in its necessary preliminaries—which might include the removal of two or three monuments—that the Chapter would require a considerable sum to carry it out. They hoped to begin it at once; but if the country wished to see the Cathedral lifted above all ordinary risk of disaster, they should send in generous contributions without delay. The larger part of the fund would have to be raised from private sources.

It is stated that the grouting experiments which have been in progress at the old Post Office site, with a view to determining the possibility of strengthening the foundations of St. Paul's Cathedral by injecting liquid cement into the subsoil, have been successful. A number of borings have been made, and the liquid cement has been injected into them by compressed air. The cement has permeated the subsoil for a considerable distance round each of the borings; and not only gravel and sand but also clay has been transformed into a solid concrete mass. It is understood that the process will now be applied to the subsoil under St. Paul's Cathedral.

Professional Practice in America.

The following Agreement between an American architect and his client, which appeared under the heading "An Interesting Document" in the March number of the *Journal of the American Institute of Architects*, will, it is thought, have some interest for the architectural profession in this country:—

This agreement, made this eighth day of January, 1914, by and between the Convention of The Protestant Episcopal Church of the Diocese of Maryland, party of the first part, hereinafter designated the "Convention," and Bertram G. Goodhue, of New York City, party of the second part, hereinafter designated the "Architect."

Witnesseth that, whereas the said Convention contemplates building, upon a lot bounded by Charles Street, University Parkway, St. Paul Street and Bishoproad in the City of Baltimore, purchased by the said Convention for this purpose, a group of Diocesan buildings to consist of a Cathedral Church, to be known as the Cathedral of the Incarnation, a Library and Diocesan Headquarters, a Diocesan Hall, residences for the Bishop, Dean and Canons and the appurtenant buildings required to constitute a centre for Diocesan worship and work,

And whereas the said Architect, at the request of said Convention made through the Cathedral Trustees, has submitted certain Preliminary Sketches of said group, to wit:

1. Ground Plan on Crypt Level.
2. Ground Plan on Cathedral Level.
3. Ground Plan on Library Level.
4. West Elevation.
5. East Elevation.
6. South Elevation and Section through Cloister.
7. East Elevation and Transverse Section.
8. Water-color Perspective from Southwest.
9. Water-color Perspective from Southeast.
10. Water-color Perspective of Interior.
11. Perspective of North Porch.
12. Perspective of South Porch.
13. Perspective of Morning Chapel.

And whereas these above-mentioned Preliminary Sketches have satisfied said Convention that said Architect is competent to so modify the plans suggested in said sketches as to make them finally satisfactory to said Convention, and also to carry out said plans as so modified,

Now therefore, the said Convention hereby appoints the said Architect exclusively as the architect of the above-mentioned buildings, and the said Architect accepts said appointment upon the terms, conditions and understandings herein after set forth, to wit:

ARTICLE I. In consideration of the services of the Architect, performed and to be performed by him, the Convention hereby agrees to pay the said Architect the following sums:

Upon the signing of this agreement, ten thousand dollars (\$10,000).

When the said Architect shall have, to the satisfaction of the Cathedral Trustees, made such changes and modifications in said Preliminary Sketches as the said Cathedral Trustees may require in a written notice, which shall also state the total estimated cost of the whole group to be designed, and shall have embodied such modifications in a new set of sketches identical in subject with the Preliminary Sketches hereinbefore enumerated and equal in execution thereto, or equally satisfactory to the Cathedral Trustees, the Architect shall receive a further sum of ten thousand dollars (\$10,000), provided that after such payment nothing herein shall prevent such further modifications of these plans as the Cathedral Trustees may from time to time deem desirable.

When the Convention decides to construct the whole or any part of the work of the above mentioned buildings, it hereby agrees to instruct the aforesaid Architect in writing to make and provide working drawings, specifications, detail drawings,

and supervision covering the work so ordered, whereupon the Architect agrees to make and provide the above mentioned working drawings, specifications, detail drawings, and supervision, and to give prompt and requisite services and attention as Architect to the construction of any portion of said group so designated by said Convention. For these further services the Convention agrees to pay the Architect as follows:

(a) Upon the completion of the general working drawings and specifications (exclusive of detail drawings), an additional three and one-half per cent. upon the assumed cost of that portion of the work for which such working drawings and specifications have been prepared.

(b) For detail drawings, an additional one per cent. upon the assumed cost of the work, payable from time to time as the work progresses.

(c) For supervision and such other architectural services as are reasonably necessary in the proper erection of the work, an additional one and one-half per cent. upon the cost, payable from time to time as the work progresses.

If, in the construction of any one or more units of the group, it shall seem wise to the Cathedral Trustees and the Architect not to employ a General Contractor, but to deal with what in the case of the employment of a General Contractor would be the sub-Contractors direct, and the Architect shall give the supervision usually given by the General Contractor, he shall receive an additional compensation of four per cent. upon the cost.

This extra commission not to be construed as applying to the case where several General Contractors may be simultaneously employed, each upon a separate unit of the group.

On portions of the work excluded from any General Contract and estimated on independently and let under separate contracts, excepting as hereinafter otherwise provided, the Architect shall be paid a total fee of ten per cent. upon the cost of such excluded work.

On monuments, furniture, lighting fixtures, cabinet-work, and special hardware, the Architect shall be paid a total fee of twenty per cent. upon the cost of such work.

On articles purchased, or ordered, with the advice or under the direction of the Architect, at the request of the Cathedral Trustees, although not designed by him, a special fee of six per cent. shall be paid.

Payments for work for which other than six per cent. is charged are to be made in the same proportions and order as that required in the case of the six per cent. commission on any general contract.

The compensation of the Architect hereunder shall be based upon the actual cost of each portion of the work, as ordered, and should any difference exist between assumed cost and actual cost, then the commission on such difference shall be adjusted at the time of final payment on such portion of the work.

Until actual estimates are received, charges are based upon the assumed cost of each portion of the work, and payments received by the Architect are on account of the entire fee for that portion of the work.

ARTICLE II. Nothing herein contained shall be construed as creating any obligation on the part of said Convention to proceed with the construction of the whole or any portion of said Cathedral group, until it shall see fit to do so, or, after the construction of any portion of said group has been commenced, to continue the same, whenever for any reason the said Convention may deem it wise to suspend or terminate such construction.

ARTICLE III. It is further covenanted and agreed by the parties hereto that the relations between the Convention and the Architect shall be governed by the following

GENERAL CONDITIONS.

Supervision.

The supervision of the Architect, as distinguished from the continuous personal services which may be secured by the employment by the Convention of a clerk, or clerks, of-the-works, means such inspection by the Architect, or his deputy,

of the work in process of construction or erection, as he finds necessary to ascertain whether it is being executed in general conformity with the contract.

Clerk-of-the-Works.

Should the Convention employ a clerk, or clerks, of-the-works for constant inspection, each shall be nominated by the Architect, be approved and appointed by the Trustees, and perform his duties under the direction of the Architect.

Services of Specialists.

Where heating, ventilating, mechanical, structural, electrical or sanitary problems are, in the opinion of said Architect and of said Cathedral Trustees, of such nature as to require the services of a specialist, such specialist being approved by both parties to this contract, his services shall be retained and paid for by said Convention.

If chemical or mechanical tests, surveys or borings shall become necessary, they shall be made under the supervision of said Architect, upon the written consent of said Cathedral Trustees, and not otherwise, and shall be paid for by said Convention.

Travelling Expenses.

Necessary travelling expenses of the Architect or his deputy between New York and Baltimore, and for such trips as may be required to inspect materials for the building, shall be paid by the Convention on demand; but nothing additional shall be paid for time consumed in travelling or spent in superintending the work, except as noted above.

Changes.

If, after working drawings, specifications, or other documents have been formally approved in writing by said Cathedral Trustees, changes therein are subsequently required by them, the Architect shall be paid for such changes four times the amount paid by the Architect to draughtsmen and other employees actually engaged on the work, as shown by their time sheets, or, if the Architect be put to extra labour or expense by the delinquency or insolvency of the contractors, then the Architect shall be fully reimbursed for the expense incurred.

Total Cost.

The total cost of each portion of the work is to be interpreted as the cost of all materials and labour necessary to complete such portion of the work, plus contractor's profits, as such would be if all materials were new and all materials and labour fully paid for at market prices current when such portion of the work was ordered.

Ownership of Plans.

Upon the payment to the Architect of the said sum of ten thousand dollars (\$10,000), hereinbefore provided to be paid upon the signing of this contract, said Preliminary Sketches shall become the absolute property of said Convention to use as it shall see fit.

Upon the payment to the Architect of the said sum of ten thousand dollars (\$10,000), hereinbefore provided to be paid upon the completion to the satisfaction of said Cathedral Trustees of said Modified Preliminary Sketches, said Modified Preliminary Sketches shall become the absolute property of said Convention for its own use and purposes, free from any interference, control, ownership, or property of any kind therein of said Architect, or of any other person or persons whatever claiming by, through, or under him, provided nevertheless that the said Convention shall, upon the request of the Architect, provide him at all times such access to the said Preliminary Sketches as shall enable said Architect, without additional expense to him, to make such working and other drawings as may be necessary in the further performance of this contract.

Drawings.

The Architect shall, as the work progresses, provide the Convention with a complete set of black-print reproductions, at the same scale, of the general working drawings and specifications, which, upon the payment of the sums herein provided to be paid, in the event of the termination of this contract,

shall become the absolute property of said Convention, to use as it shall see fit.

It is understood that the said Convention shall be entitled to print, photograph, and publish any of the drawings or sketches herein referred to, and that, whenever any of said drawings shall under the terms of this Agreement become the property of said Convention, any copyright of the same by the said Architect shall be assigned by said Architect to said Convention for its sole use and benefit.

Death of Architect.

Should the Architect die, or become permanently disabled, this contract shall terminate at the option of the Convention, and, should such option be exercised, the Convention shall forthwith compensate the Architect or his legal representatives as follows:

(1) Should such death or disability occur prior to the payment of the ten thousand dollars (\$10,000), hereinbefore provided to be paid upon the completion of the Modified Preliminary Sketches, said sum shall, upon the exercise of said option, immediately become due and payable, and, upon the payment of the same, such portion of said Modified Preliminary Sketches as may at that time be completed shall become the absolute property of said Convention, to be used as it may see fit.

(2) Should such death or disability occur after the payment of said sum of ten thousand dollars (\$10,000), hereinbefore provided to be paid upon the completion of the Modified Preliminary Sketches, there shall become due and payable upon the exercise of said option, over and above any sums then payable and unpaid under the previous terms of this agreement, an amount equal to four times the sum paid by the Architect to draughtsmen and other employees actually engaged on the work, as shown by their time sheets, upon such work ordered hereunder as shall not be complete at the time of such death or disability, and, upon the payment thereof and of any other sums at that time due under this Agreement, all drawings, specifications and other data which have not already come into the hands of said Convention under the provisions of this Agreement shall be forthwith delivered by said Architect or his legal representatives to said Convention to be used as it may see fit.

Termination of Contract by Convention.

The said Convention may, after ninety (90) days' notice in writing, terminate the employment of said Architect, as Architect of the said Cathedral Group, upon the completion of the Modified Preliminary Sketches and the payment of the sums hereinbefore provided to be paid therefor, or upon the completion of the working drawings, specifications, detail drawings, or supervision of any portion of the work ordered in writing by the Convention, and the payment of the compensation therefor provided for by the terms of this Agreement.

Should said Convention so terminate the employment of said Architect, it shall forthwith pay to him the additional sum of thirty thousand dollars (\$30,000), which said sum, when paid, the said Architect, for himself, his heirs, personal representatives and assigns, hereby agrees to accept as in full compensation for the exercise by the said Convention of its option hereunder to terminate the employment of said Architect, as Architect of the Cathedral Group as aforesaid, as well as in full of all claims and demands of the said Architect against the said Convention, its successors or assigns, for services of the said Architect as architect, and for any and all plans, sketches or drawings or specifications made by said Architect for, or in relation to, said Cathedral Group; which said plans, sketches, drawings and specifications the said Convention shall be at liberty to use, in whole or in part, in any manner and to any extent it may see fit, in the future prosecution of the work under the supervision of any other architect or architects; and any such plans, sketches, drawings or specifications not already in the possession of the said Convention under the terms of this Agreement at the time of the exercise of said option shall forthwith be delivered by said Architect to said Convention.

[Note.—The contract then concludes with the usual signature form.]

The Architectural Review.

The high standard of excellence which marked the *Architectural Review* when it came out in its new form some year or so ago, has been well maintained in every number since, both from the literary standpoint and the pictorial. There is generally a freshness and piquancy about its articles which make them eminently readable, and each number seems to surpass its predecessor in the beauty of its illustrations.

The April number opens with a timely article on "The Reparation of St. Paul's Cathedral," by Mr. Mervyn Macartney, Surveyor to the Fabric. The writer deals particularly with the dome and its supports, and with the works of repair it is proposed to put in hand, these latter being considered in the light of the valuable information derived from the examination of the structure that he has been carrying out during the last six months with the aid of Mr. Caröe. The conclusion arrived at is that the sum of £70,000 for which the Dean and Chapter are appealing is the minimum which, very carefully expended, will suffice to ensure the safety of the fabric. To those, Mr. Macartney says, who have not made themselves familiar with the subject, this sum may appear large, but a very cursory study of the essential requirements of the scheme in contemplation would convince even the layman that, having regard to the immense size of the building, and the extent to which deterioration in the past has advanced, the sum is based on the most conservative estimate. Among the illustrations to the article is a tracing of a masterly drawing by Mr. William Dunn and Mr. Matthew J. Dawson representing an isometric view of the great dome.

In a contribution by Mr. Paul Mouratov (translated from the Russian by the Princess Alexandre Gagarine) is told the thrilling story of the genius of Giovanni Battista Piranesi. Illustrating it are reproductions of three etchings from the famous "Carceri d'Invenzione" series. Of Piranesi's many wonderful etchings none equal in quality of invention and brilliance of technique this series of imaginative conceptions. At the time of their production the artist was suffering from the delirium of a fever, and the etchings are the visual expression of a mind possessed by a wild riot of fancy. Mr. Mouratov quotes De Quincy's description of them in his *Confessions of an English Opium-Eater*, where he says:—

Some of these engravings represented vast Gothic halls, on the floor of which stood mighty engines and machinery, wheels, catapults, &c., expressive of enormous power put forth, or resistance overcome. Creeping along the sides of the walls, you perceived a staircase; and upon this, groping his way upwards, was Piranesi himself. Follow the stairs a little farther, and you perceive them reaching an abrupt termination, without any balustrade, and allowing no step onwards to him who should reach the extremity, except into the depths below. Whatever is to become of poor Piranesi, at least you suppose that his labours must now in some way terminate. But raise your eyes, and behold a second flight of stairs still higher on which again Piranesi is perceived, by this time standing on the very brink of the abyss. Once again elevate your eyes and a still more aerial flight of stairs is described; and there again is

the delirious Piranesi, busy on his aspiring labours; and so on, until the unfinished stairs and the hopeless Piranesi both are lost in the upper gloom of the hall."

Other contents of this number are "The Judges' Lodging, Oxford," by M. Jourdain; "The Gardens of Gravetye Manor, Sussex"; the first instalment of an article on Decorative Paintings, by Ingleson C. Goodison, with illustrations from the work of Frans Snyders, Paul de Vos, Melchior d'Hondecoeter, and Campidoglio; the Florence Nightingale Memorial and the Robert Boyce Memorial, Liverpool, the work of Messrs. Willink & Thicknesse; and a Special Supplement entitled "The Architecture of the Liner," with an article on Planning, Decoration, and Equipment, by Mr. Arthur J. Davis, and illustrations of the palatial interiors of the great Cunard liners, the "Aquitania," "Lusitania," and "Mauretania"; the "Imperator" and "Admiral von Tirpitz," of the Hamburg-Amerika line; "The Empress of Asia" and the "Empress of Russia," belonging to the Canadian Pacific Railway, and other vessels of this class.

COMPETITIONS.

Hythe Concert Hall Competition.

Members and Licentiates are advised that the conditions of this competition are not in accordance with the Institute Regulations for Architectural Competitions, and the Competitions Committee are in correspondence with the promoters with a view to getting them amended.

Hale Grove Gardens School Competition, Mill Hill.

Following the practice of briefly styling a competition by the name of the locality in which the proposed building is to be erected, the notice vetoing the above competition was sent out headed simply "Mill Hill School Competition," it being overlooked that this might be taken to refer to the well-known public school which goes by the name "Mill Hill School." We much regret that this unfortunate oversight has been the cause of annoyance to the Mill Hill School authorities, and tender them our sincere apologies.

MINUTES XII.

At the Twelfth General Meeting (Ordinary) of the Session 1913-14, held Monday, 20th April 1914, at 8 p.m.—Present: Mr. George Hubbard, F.S.A., *Vice-President*, in the Chair; 19 Fellows (including 5 members of the Council), 28 Associates (including 1 member of the Council), 5 Licentiates, and a few visitors.—the Minutes of the meeting held 6th April 1914, having been published in the *JOURNAL*, were taken as read and signed as correct.

The decease was announced of Bernard William Hart Brameld, *Fellow*, elected 1903, and William Laidlaw Carruthers, *Fellow*, elected 1892.

Mr. Max Clarke [F.] having read a Paper on *PROFESSIONAL PRACTICE*, a discussion ensued, and on the motion of Mr. R. L. Harrison, seconded by Mr. Boydell Houghton, a vote of thanks was passed to Mr. Clarke by acclamation.

The proceedings closed and the meeting separated at 10.35.



REPORT OF THE COUNCIL FOR THE OFFICIAL YEAR 1913-1914.

Approved and adopted at the Annual General Meeting, Monday, 4th May 1914.

SINCE the publication of the last Annual Report the Council have held 20 Meetings, of which the Council elected in June last have held 16. The following Boards and Committees appointed by the Council have met and reported from time to time on the matters referred to them: Architectural Education, Annual Dinner, Competitions, Fellowship Drawings, Finance and House, Official Architecture, Professional Questions, Royal Gold Medal, Sessional Papers, Town Planning, Constitutional, Professional Defence, Reinforced Concrete, Selection and General Purposes, Payment of Examiners, Paris Exhibition, Journal and Kalendar. Particulars of the work of some of these Boards and Committees are embodied in the Report under various headings.

The losses by death have been as follows:—*Fellows*: John Belcher, R.A., Robert Henry (1) *Obituary*. Burden, William Laidlaw Carruthers, Thomas Egbert Lidiard James, William Chasen Ralph, Ernest Augustus Runtz, Robert Douglas Sandilands, John Oldrid Scott, Arnold Thorne, Walter Liberty Vernon, John Dodsley Webster, William Clement Williams, George Wilson; *Retired Fellows*: James Hine, Henry Jones Lanchester; *Associates*: Ernest Barraclough Crossley, Ernest Outram Cummins, Edward Instone, Joseph Johnson, John Humphreys Jones, William Murray; *Licentiates*: Ernest Charles Henry Bird, Thomas Edwin George Cooper, Peter Rosby Donald, William Ferguson, Frederick Russell Laverick, Thomas McMillan, William John Oliver, William Edward Pinkerton, Francis Léon Pither; *Honorary Associate*: Sir Alfred East; *Hon. Corresponding Members*: Professor Charles Babcock, George Browne Post, Heino Schmieden, Joseph Auguste Emile Vaudremer. Obituary notices of many of these members have appeared in the JOURNAL.

The Council regret also to record the death of Mr. Charles Tanner, Chief Clerk, who had been for twenty-seven years in the service of the Institute.

The following tabular statement shows the present subscribing membership of the Royal (2) *Membership*. Institute compared with corresponding periods of 1911, 1912, and 1913:—

Year.	Fellows.	Associates.	Hon. Associates.	Total.
1911	862	1,509	55	2,426
1912	859	1,581	56	2,496
1913	847	1,630	54	2,531
1914	852	1,695	56	2,603

During the official year since the last Annual General Meeting 80 Fellows have been elected, 97 Associates, 2 Honorary Fellows, and 3 Honorary Associates.

Licentiates. There are 2,070 Licentiates on the roll. Since the publication of the last Annual Report 17 Licentiates have passed the Special Examination qualifying for election to the Fellowship, and 10 have been duly elected as Fellows.

(3) *New Allied Society*. Since the publication of the last Annual Report, the Council have had the pleasure of admitting into alliance with the Royal Institute, the Queensland Institute of Architects.

The Progressive Examinations were held in June and November-December 1913. The Preliminary was held in London, Belfast, Birmingham, Bristol, Glasgow, Leeds, Liverpool, Manchester, and Newcastle; the Intermediate in London, Belfast, Bristol, Glasgow, Leeds, Liverpool, Manchester, and Newcastle. The Final and Special Examinations were held in London, and the Special Examination for Colonial candidates in June 1913 in Sydney, and in December 1913 in Toronto. The Council desire to record their thanks for the valuable services rendered by the Honorary Secretaries and Examination Committees of the various Allied Societies. The results are shown in the following table:—

	Admitted.	Exempted.	Examined.	Passed.	Relegated.
PRELIMINARY EXAMINATION . . .	283	81	202	141	61
INTERMEDIATE EXAMINATION . . .	196	28	168	103	65
FINAL AND SPECIAL EXAMINATIONS . .	213	—	213	96	117

The Ashpitel Prize was awarded to Mr. William Wallace Friskin.

The Statutory Examinations qualifying for candidature as District Surveyor in London, and for candidature as Building Surveyor under Local Authorities, were held in London in October 1913. There were 6 candidates, of whom 4 passed.

The Council desire to thank the Honorary Examiners for the continuance of their invaluable services.

The Deed of Award of the various Prizes and Studentships was presented to the Institute at a General Meeting on the 26th January 1914. At the Presentation of Prizes on the 9th February 1914, an Address to Students was delivered by the President, and a Criticism of the work submitted, illustrated by lantern slides, was read by Mr. Walter Cave [F.]. An Exhibition of the Drawings was held from the 27th January to the 9th February in the Royal Institute Galleries, and was visited by 1,300 persons. A selection of the Prize Drawings is now being sent the round of the Allied Societies.

The first Studentship at the British School at Rome awarded under the Henry Jarvis Bequest was awarded to Mr. Louis de Soissons, who is now in residence at Rome, and the Henry Jarvis Scholarship at the Architectural Association has been awarded to Mr. H. J. H. Dicksee.

During the Session the following Papers have been read:—

17th Nov. 1913: "The New Wesleyan Hall," by H. V. Lanchester [F.].

15th Dec. 1913: "The Repair of Ancient Buildings," by W. A. Forsyth [F.].

26th Jan. 1914: "London Traffic Problems," by Col. Sir Herbert Jekyll.

23rd Feb. 1914: "London Railway Stations," by Paul Waterhouse [F.].

23rd March 1914: "Borrowing in Architecture," by L. March Phillipps.

6th April 1914: "The Development of London and the London Building Acts," by W. R. Davidge [A.].

20th April 1914: "Professional Practice," by Max Clarke [F.].

The following Paper remains to be read:—

18th May 1914: "The London Society and its Aims," by T. Raffles Davison [H.A.].

Since the issue of the last Annual Report the Council have appointed the following gentlemen to serve as representatives of the Royal Institute:—

Third International Congress of Art, Ghent, July 1913	Mr. George Hubbard.
Third International Road Congress, London, June 1913	Mr. H. V. Lanchester.
Conference convened by the Chief Industrial Commissioner for the purpose of considering questions of demarcation between work of Plumbers and Heating and Domestic Engineers	Mr. H. D. Searles-Wood. Mr. George Hubbard.
Intercolonial Conference on National Health, 1914—Exhibition Sub-Committee.	Mr. H. D. Searles-Wood
Ancient Monuments Board for England	Mr. Reginald Blomfield, R.A.

Arterial Roads Conference, Local Government Board	{ Sir Aston Webb, R.A. Mr. H. V. Lanchester.
Provisional Committee for a Ministry of Fine Arts	{ Mr. Reginald Blomfield, R.A. Mr. Ernest Newton, A.R.A. Mr. Henry T. Hare. Mr. C. Stanley Peach.
Royal Sanitary Institute Congress, Blackpool, July 1914	{ Mr. Edwin T. Hall. Mr. G. Hastwell Grayson.
General Council for the National Registration of Plumbers	Mr. H. D. Searles-Wood.
Board of Architectural Studies, Cambridge University	Professor Beresford Pite.
Tribunal of Appeal	Mr. John Slater.
	<i>North-East Conference :</i> Mr. W. R. Davidge.
	<i>North-West Conference :</i> Professor S. D. Adshead.
	<i>South Conference :</i> Mr. Paul Waterhouse.
Sectional Conferences on Arterial Roads, Local Government Board	<i>North Conference :</i> Mr. Raymond Unwin.
	<i>South-West Conference :</i> Mr. H. V. Lanchester.
	<i>South-East Conference :</i> Mr. W. R. Davidge.
Liverpool Town Planning Exhibition and Conference	Mr. G. Hastwell Grayson.
London University Architectural Education Committee.	{ Mr. Ernest Newton, A.R.A. Mr. John Slater.

During the course of the year the President has appointed the following architects to act as Arbitrators in connection with building disputes :—

Adams, H. Percy.	Flint, Ernest.	Lanchester, H. V.	Seward, Edwin.
Cantley, H. M.	Garbutt, Matt.	Livesay, G. A. Bligh.	Slater, John.
Clarke, Max.	Green, Mowbray A.	Oatley, G. Herbert.	Stoner, Alfred.
Corbett, E. W. M.	Greenop, Edward.	Peach, C. Stanley.	Sutton, Ernest R. E.
Crompton, W. E. Vernon.	Hall, Edwin T.	Redfern, Harry.	Waterhouse, Paul.
Cross, A. W. S.	Halliday, G. E.	Searles-Wood, H. D.	White, W. Henry.
Dawber, E. Guy.	Jerman, James.	Seth-Smith, W. H.	Wilson, A. Needham.
Downing, H. P. Burke.			

(8) **Grants.** Since the issue of the last Annual Report the Council have made the following grants :—

	£	s.	d.		£	s.	d.
The Architectural Association	*300	0	0	Royal Architectural Museum	21	0	0
Exhibition of English Architecture (Paris)	250	0	0	British School at Rome	21	0	0
The Library Fund	200	0	0	Byzantine Research and Publication Fund	10	10	0
St. Paul's Cathedral Preservation Fund	105	0	0	Alma-Tadema Memorial Fund	10	10	0
Architects' Benevolent Society	100	0	0	Sir Robert Hunter Memorial Fund	10	10	0
New British School at Rome	50	0	0	Choisy Memorial Fund	6	0	0
Crystal Palace—Mansion House Fund	26	5	0	Egyptian Exploration Fund	5	5	0
The Architectural Association Sketch Book	25	0	0				

(9) **Competitions.** The following have been the President's Appointments to Assessorships during the year commencing May 1913 :—

Bradford	Dwelling Houses	Mr. Henry T. Hare.
L.C.C.	Elementary Schools	Mr. John W. Simpson.
Manchester	Additions to Royal Exchange	Mr. James S. Gibson.
Sunderland	Training College	Mr. P. S. Worthington.
Bath	Secondary School	Mr. Henry T. Hare.
Hendon	Swimming Baths	Mr. H. W. Wills.
London	Metropolitan Water Board Offices	Mr. E. Guy Dawber.
Paddington	Central Baths	Mr. Leonard Stokes.

* This includes £100 on account of the year 1912-1913.

Mr. T. E. Colcutt was appointed Assessor in the Ottawa Government Buildings Competition by the Council of the Royal Institute at the request of the Canadian Government.

(10) Royal Gold Medal. The Royal Gold Medal was awarded to Mr. Reginald Blomfield, R.A., for his executed works as an architect and for his contributions to the Literature of Architecture. The Medal was presented to Mr. Blomfield by the Earl of Plymouth at the Meeting on the 23rd June 1913.

It has been decided to award the Medal this year to Monsieur Jean Louis Pascal for his distinguished services as a teacher of architecture and for his executed works as an architect. His Majesty the King has graciously signified his approval of the award, and the Medal will be presented to Monsieur Pascal at the General Meeting on the 22nd June.

(11) Registration. The proposals of the Council with regard to Registration were laid before the General Body at Special General Meetings on 1st December 1913 and 5th January 1914, and at the second of these Meetings a Resolution was unanimously passed in favour of proceeding with a policy of Registration by Charter.

The detailed proposals of the Council based upon this Resolution are now in the hands of the Members.

The Council have decided to oppose the Architects' Registration Bill which is now being promoted by the Society of Architects.

(12) Board of Professional Defence. During the course of the year the Board have been chiefly engaged in considering a scheme for the establishment of a Legal Defence Union for Architects. It is hoped that at an early date particulars of the scheme will be submitted to the General Body.

(13) Professional Conduct. On the advice of the Professional Questions Committee the Council have dealt with all complaints as to the professional conduct of members that have been laid before them. Under the provisions of By-laws 24 and 25 a Fellow has been expelled for unprofessional conduct and a Licentiate has been expelled for taking part in a competition which had been banned by the Council.

(14) The Schedule of Charges. The revised Schedule of Charges has been considered at several General Meetings since the issue of the last Annual Report, and it is hoped that the discussion of the Schedule will be completed before the end of the present Session.

(15) Official Architecture. The Committee mentioned in the last Annual Report has met regularly during the Session and has presented to the Council an important Interim Report on the subjects referred to it. The Committee is now preparing its Final Report.

(16) The Allied Societies. A Committee consisting of the Presidents of all the Allied Societies in the United Kingdom has been appointed for the purpose of considering and reporting to the Council upon various suggestions which have been received from the Councils of the Allied Societies with reference to the re-arrangement of their boundaries and the improvement of their organisation. The Report of this Committee is now in the hands of the Council.

(17) Finance. The usual Financial Statement appended to this Report indicates the satisfactory state of the finances of the Royal Institute. The submission to the General Body of the Special Report on the subject which was mentioned in the last Annual Report has been deferred until the liquidation of the Architectural Union Company is completed.

REPORT OF THE BOARD OF ARCHITECTURAL EDUCATION.

The Board have held 15 meetings since the issue of the last Annual Report.

Mr. Curtis Green resigned office as Hon. Secretary on his election as President of the Architectural Association, and Mr. Gerald C. Horsley was appointed in his place.

The following Committees of the Board have met and reported from time to time on the matters

referred to them:—A. A. Henry Jarvis Scholarship, Examinations, Exemptions, Testimonies of Study, Revision of Syllabus, Prizes and Studentships, Examiners, Herbert Baker Scholarship.

Problems in Design.—During the year 524 designs have been received and adjudicated on by the Board, and of these 373 have been approved, being an increase of 296 and 224 respectively on the previous year. These designs have been publicly exhibited in the Galleries of the Royal Institute for three days after each adjudication, and a large number of visitors have availed themselves of the opportunity of viewing them.

Designs made by Students at the Royal Academy are accepted by the Board in lieu of the four problems in Design required from other candidates.

Students may submit, in lieu of one of the alternative problems, designs made by them in a recognised School of Architecture.

Winners of the Soane and Tite Prizes, together with those receiving Hon. Mention therein, are exempted from submitting the four Problems in Design. Designs submitted in these competitions which have not received a prize may be submitted to the Board for approval in lieu of one of the Problems.

Examinations.—The Board have conducted the Royal Institute Examinations, and the results as reported to the Council have been published.

Prizes and Studentships.—Committees of the Board, which included several members of the Institute outside the Board, have judged the various Designs and Drawings submitted for the Institute and other Prizes, and have reported thereon to the Council, and the pamphlet of the Prizes and Studentships for 1915 prepared by the Board has been approved by the Council and published.

National Scholarships.—The Board, at the request of the Board of Education, have conducted the examination of candidates for the National Scholarship in Architecture. These candidates are required to pass the Intermediate Examination, but are exempt from submitting the Testimonies of Study required from Institute candidates.

Exemptions from the Intermediate Examination.—The privilege of exemption from the Intermediate Examination is now granted by the Council, on the recommendation of the Board, to Students who have passed with distinction through a full course of study at all Colonial or Foreign Universities and Schools of Architecture.

Examination of Licentiates.—At the request of the Board arrangements have been made with the Royal Victorian Institute of Architects, the New Zealand Institute of Architects, and the Royal Architectural Institute of Canada to conduct the Examination of Licentiates desirous of becoming Fellows, on identical lines with that held in London.

REPORT OF THE ART STANDING COMMITTEE.

Six meetings have been held since the issue of last Session's report.

Mr. E. Guy Dawber was elected Chairman, and Messrs. W. A. Forsyth and Percy E. Lovell Hon. Secretaries.

It was felt at the early meetings that some definition in the work of the Committee was necessary in order that matters could be dealt with which were not necessarily the work of the Council. Careful consideration was given to this matter, and the functions were defined as follows:

1. To deal with the preservation and repair of national monuments.
2. To consider the artistic aspects of all propositions for new works and public improvements.
3. To make suggestions as to public improvements of an architectonic character.
4. To consider any course that should be adopted for the purpose of securing a higher standard of architectural design, taking into consideration both the training of the architect and the education of the public.

5. Generally, to deal with all matters tending to advance the art of Architecture.

The attention of all members of the Institute is drawn to the foregoing duties defining the scope of the Committee, in order that instances may be reported where the services of the R.I.B.A. may assist in the promotion or preservation of some work of British architecture.

Of the remaining subjects under review, the following were the most important :

It was regretted that H.M. Office of Works were unable to embody the old General Post Office in the new buildings to be erected upon that site. The Committee therefore considered the new proposal in conjunction with the official plan of the new roadway from St. Paul's Bridge at the east end of the Cathedral, and it is to be further regretted that the official lay-out takes but slight advantage of the opportunity of a great London improvement, for which such facilities so seldom occur.

The suggestion that the London University should be transferred to Somerset House has engaged the Committee's attention. Careful consideration will be given to the subject if the proposal takes definite shape, for it is anticipated that some structural changes will be necessary in the adaptation of this great building to the purposes of a university.

The rumour that Temple Bar was to be removed from Theobalds Park to a site in London proved to be groundless, as the owner informed the Committee that there is no such intention.

The Committee gave its full support to the proposals for preserving two important London houses. With regard to No. 75 Dean Street, it is satisfactory to record that the building has been scheduled under the terms of the Ancient Monuments Acts, and is, therefore, for immediate purposes, free from risk of demolition. With Nos. 55 and 56 Great Queen Street—the well-known brick house, said to be the work of Inigo Jones—the case is different and cannot be scheduled. The owners are considering influential representations urging the retention of what must be regarded as an early example of street architecture.

The scheme of National Cottage Building promoted by the Board of Agriculture was carefully considered by the Committee. With the principles of the Board's Report the Committee were in general agreement, but made strong recommendations for the maintenance of local tradition, both in design and construction.

REPORT OF THE LITERATURE STANDING COMMITTEE.

Eight meetings have been held since the election of the present Committee.

At the beginning of the session the following officers were elected : Mr. W. H. Ward, Chairman ; Mr. Charles E. Sayer, Vice-Chairman ; Mr. C. Harrison Townsend and Mr. W. G. Newton, Hon. Secretaries.

The Committee are glad to be able to announce that their recommendation to the Council that an increase should be made in the annual grant to the Library has been adopted, the Council having now raised the grant to the sum of £200. This increased amount will enable the Committee to add to the Loan Collection duplicate copies of many books which are in request but which have not hitherto been available.

At the request of the Council the Committee have become annually responsible for the appointment of the three following Committees : Journal and Kalendar, Records, and Sessional Papers.

The question of the adequacy of the existing accommodation in the Library for the storage of drawings having been considered by the Committee, a report has been sent forward to the Council containing recommendations for the improvement of the present system of drawers, and suggestions for its extension.

The Committee submitted to the Council a scheme for the publication of the Burlington-

Devonshire Collection of Drawings, but owing to the necessarily heavy expenditure involved, the Council were unable to advise its adoption.

The suggestion of the Committee that the Institute should subscribe to the Byzantine Research Fund has been accepted by the Council, and the publications of the Fund will now be available in the Library.

The following is the Librarian's Report to the Committee :—

During the twelve months ending the 31st March of the present year 239 volumes and 37 pamphlets have been added to the Library of the Royal Institute, exclusive of periodicals, reports and transactions of Societies, and parts of works issued in serial form.

The number of works presented was 133 volumes and 36 pamphlets.

The number of works purchased comprised 106 volumes, of which 44 were added to the Loan Library.

The attendance of readers in the Reference Library numbered 5,964.

The number of books issued on loan was 3,188.

The number of tickets issued for admission to the Library, other than to members of the Institute or to Students and Probationers, was 55.

The number of books issued through the post was 354.

LIBRARY STATISTICS 1913-14.

DATE.	DAY ATTENDANCES.			EVENING ATTENDANCES.			Books issued on Loan.
	Members.	Non-Members.	Total.	Members.	Non-Members.	Total.	
1913.							
April	175	182	357	91	156	247	299
May	146	181	327	75	102	177	261
June	169	193	362	68	107	175	244
July	139	171	310	63	70	133	227
August	Reference Library Closed.			Reference Library closed.			114
September	130	163	293	77	74	151	243
October	174	166	340	104	150	254	322
November	166	188	354	77	148	225	307
December	157	138	295	85	97	182	249
1914.							
January	197	190	387	88	118	206	307
February	158	194	352	99	143	242	341
March	169	157	326	130	139	269	318
TOTAL	1,780	1,923	3,703	957	1,304	2,261	3,232

At the request of Miss E. P'Anson the Librarian selected a large number of valuable architectural works from the collection of her father, the late Mr. Edward P'Anson, *Past President*, and of her brother, the late Mr. E. B. P'Anson, *Fellow*, which she wished to present to the Library as a memorial of their association with the Institute. The books included: Seroux d'Agincourt, *Histoire de l'Art par les Monuments*; Wilkins, *The Antiquities of Magna Græcia*; Le Rouge, *Description de Chambord*; Guichard, *Dessins de Décorations des Principaux Maîtres*; Grüner, *Fresco Decorations . . . in Italy*.

Donations of books, pamphlets, or drawings have been received from Mr. J. D. Crace, Mr. W. H. Ward, Sir Thomas G. Jackson, Mr. A. W. S. Cross, Mr. John Bilson, Mr. Francis Bond, Mr. Jules Brunfaut, Mr. George Hubbard, Mr. Benj. Ingelow, Herr Cajus Th. Novi, Mr. R. S. Ayling, Professor Baldwin Brown, Mr. John Begg, Mr. J. W. Rodger, Mr. P. M. Johnston, Mr. Walter R. Jaggard, Mr. B. T. Stallybrass, Mr. Theophilus Pitt, and Mr. E. H. Freshfield.

Among the books purchased or presented during the year may be mentioned: Ambler's *Old Halls and Manor Houses of Yorkshire*; Arata's *L'Architettura arabo-normanna e il rinascimento in Sicilia*; Bachmann's *Kirchen und Moscheen in Armenien und Kurdistan*; Berta's *Monumenti storici ed artistici del cantone Ticino*; Bond's *Introduction to English Church Architecture*; Briggs' *Baroque Architecture*; Bullock's *Grinling Gibbons and his Compeers*; Byzantine Research Fund's *The Church of S. Eirene at Constantinople*; Colasanti's *L'Arte bisantina in Italia*; Cross's *History of Architecture*; Ebhart's *Die Burgen italiens, &c.*; Freshfield's *Cellar*

Trichoraë, and other Christian Antiquities in the Byzantine Provinces of Sicily, &c.; Comte de Fels' *Ange-Jacques Gabriel*; Havell's *Indian Architecture*; St. John Hope's *Windsor Castle*; Jackson's *Byzantine and Romanesque Architecture*; Jannoni's *Saggi di architettura e decorazione italiana*; Rüdell's *Die Kahrie-Dschamisi in Constantinopel*; Sluytermann's *Intérieurs Anciens en Belgique*; Tipping's *English Homes of the Early Renaissance*; Triggs' *Garden Craft in Europe*; Vasi's *Raccolta' delle più belle vedute antiche, e moderne di Roma, &c.*; Richardson's *Monumental Classic Architecture in Great Britain and Ireland during the XVIIIth and XIXth Centuries*.

REPORT OF THE PRACTICE STANDING COMMITTEE.

The Practice Standing Committee beg to submit the following report of their proceedings for the Session 1913-1914:—

Sixteen meetings have been held since the date of the last report, of which five have been special meetings.

The officers elected at the commencement of the Session were Mr. William Woodward, Chairman; Mr. Max Clarke, Vice-Chairman; Messrs. Herbert A. Satchell and Matt Garbutt, Hon. Secretaries.

The Committee have had under consideration various matters of which the following are the most important:—

Revision of Conditions of Contract.—The Sub-Committee dealing with this subject was reappointed at the commencement of the Session. It has reported to the Committee to the effect that having sat since March 1911, and having dealt with certain Clauses of the existing Conditions of Contract, and also with Sub-Contractors' Agreements, and the Institute of Builders having expressed their desire that the whole of the Clauses of the Conditions of Contract should be dealt with at the same time rather than in a piecemeal manner, and this view having been adopted by the Council, the Sub-Committee desired to be relieved of their task. This report has been adopted by the Committee, and has been submitted to the Council.

L.C.C. By-laws.—The L.C.C. By-laws (under Sec. 164 of the London Building Act 1894) for the regulation of lamps, signs, or other structures overhanging the public way, and not being within the City of London, which in their draft form were reported on by the Committee last Session, again came before the Committee as passed by the L.C.C., though awaiting sanction by the Local Government Board. The Committee while generally approving the By-laws as amended, considered, as on the last occasion, that they should not be made retrospective, a point upon which their wording still appears ambiguous.

Quotation of Prices by Merchants to Architects.—The question of the quotation of prime cost prices to the Architect and to the Builder, in regard to which a deputation from the National Light Castings and Builders Merchants' Joint Committee was received by the Committee last Session, has been unable to be carried further owing to the promised statement as to what percentage represented fair discount for cash, and what should be allowed to the Builder for handling material, not having been received from the Joint Committee.

Position of Sub-Contractors, and Form of Sub-Contract.—It has been found that the question of a Form of Sub-Contract and the position of the Sub-Contractor generally, as to which both Contractors and Sub-Contractors have expressed some anxiety for a settlement, are too intimately connected with the Conditions of Contract to be advantageously dealt with separately.

Guide to Professional Practice and Sessional Paper.—It having been found impracticable to produce a report which might serve as a Guide to Professional Practice, such as was contemplated by the reference of the matter to the Sub-Committee appointed for the purpose, it was arranged that the General Meeting, at which it had been intended to present the report to the Institute, should be devoted to a Paper on Professional Practice by Mr. Max Clarke.

L.C.C. General Powers Act 1909, and Form published by the District Surveyors' Association.—In

connection with the provisions, Sec. 22 (31) of this Act, the District Surveyors' Association published a Form upon which it was suggested that the calculations and particulars to be delivered to District Surveyors under the Section quoted should be set forth. The desirability of the general adoption of this Form was referred by the Council to the Committee, and was considered by a Sub-Committee, upon which Messrs. C. Stanley Peach and F. N. Jackson also sat as Consultative Members, and after conference with representatives of the District Surveyors' Association the Sub-Committee reported that unless the Form was so modified as to make its optional character self-evident, its use appeared objectionable as tending to extend by custom the powers of the District Surveyors beyond the limits contemplated by the Act. This report was adopted by the Committee and submitted to the Council.*

Practice as to Opening of Tenders.—A representation has been received from the National Federation of Building Trades Employers deprecating the growing practice by architects and others of receiving tenders without opening them in the presence of those tendering. The Committee carefully considered the matter, and have reported to the Council that in their opinion the practice of opening tenders in the presence of those tendering is the proper practice, and should be universally adopted, not only by architects but also by all public bodies and companies.

Use of Licentiate's Affix.—Frequent cases of violation by Licentiates of their undertaking on election only to use their affix in full having been brought to the notice of the Council, the subject was referred to the Committee, who have recommended that a reminder as to the penalty attaching to breach of this undertaking should be prominently published in the JOURNAL, and that a request be issued to the professional Press inviting their co-operation in the observance of this regulation.

Tendering by Architects.—The Committee's report to the Council on the question of architects tendering for the preparation of designs, &c., of buildings, mentioned in last Session's report, was referred back by the Council for further consideration, with the suggestion that a conference should be arranged with the Board of Professional Defence. This meeting having been held, a further report has been submitted to the Council.

Notes on Dilapidations.—The attention of the Committee having been called to the need for bringing up to date the Institute's pamphlet on Dilapidations, published under the ægis of the Committee in 1903, have requested Mr. Sydney Perks to undertake this, which he has consented to do, with the co-operation of Mr. Edward Greenop.

Special Committees.—At the commencement of the Session it was decided by the Council that the Standing Committees should be requested to supervise and control the work of various Committees which had hitherto been appointed by and had reported directly to the Council. Under this arrangement the following Committees were allotted to the Practice Standing Committee, viz.: Professional Questions Committee, Schedule of Charges Committee, and Board of Professional Defence. Accordingly the Practice Committee submitted to the Council nominations for each of these Committees. Certain questions have been referred by them to the Professional Questions Committee, and from the Professional Questions Committee some dozen reports, principally dealing with questions of professional advertising, have been received, have been considered by the Committee, and have been submitted to the Council. The present procedure, though it entails some delay in dealing with the matters concerned, seems to merit a further trial.

Housing, Town Planning, &c., Act, 1909: L.G.B. Draft Regulations.—The draft of the Regulations proposed to be issued by the Local Government Board under Sec. 17 (7) of this Act having been submitted to the Committee, they have very carefully considered them in detail at four special meetings, and have had the advantage of perusing the recommendations made by the District Surveyors' Association to the L.G.B. on the matter. They have now reported to the Council, and have

*Mr. Wm. Woodward, in moving the adoption of this Report at the Meeting last Monday, mentioned that since the Report was printed the District Surveyors' Association

had met in every respect the wishes of the Practice Committee, and had issued a new Form modified in accordance with their suggestions.

suggested a considerable number of amendments, especially for the avoidance of overlapping existing Regulations, and for ensuring that, in the case of existing buildings, the new Regulations shall not be more onerous than those at present in force.

Official Architecture Committee: Cottage Building.—A communication from the Official Architecture Committee on the question of cottage building by the State has been considered by the Committee, who have submitted a report to the Council recommending that a deputation should be sent by the Institute to the Board of Agriculture to deprecate the standardisation of designs for cottages for small holdings, &c., and to urge that they shall be designed by qualified architects to suit the special circumstances and requirements.

Members' Queries, &c.—Some fifty enquiries bearing upon points of professional practice and kindred matters have been received and dealt with. Of these nearly one-half were concerned with difficulties in connection with the existing R.I.B.A. Conditions of Contract and the Schedule of Professional Charges. The enquiries, being necessarily of a confidential character, cannot be referred to in detail. In view of the number of enquiries received from architects who are connected with the Institute and its allied societies, and the time required for their due consideration, the Council have deemed it necessary to relieve the Committee from the obligation of dealing with the numerous enquiries from persons outside the Royal Institute. In accordance with their established practice, the Committee have been careful to give no opinion on matters *sub judice*, or on *ex parte* statements, seeing that such opinions might prove detrimental to brother-professionals.

REPORT OF THE SCIENCE STANDING COMMITTEE.

Since the issue of the last Report ten meetings have been held, with an average attendance of eleven. Mr. Frederic R. Farrow was elected Chairman, Mr. Digby L. Solomon Vice-Chairman, and Messrs. George Hornblower and G. Leonard Elkington Hon. Secretaries.

Preservation of Decayed Stonework.—As a result of correspondence between the Science Committee and the Society for the Protection of Ancient Buildings a short article was published in the R.I.B.A. JOURNAL of the 26th July, describing a few simple processes suitable for the preservation of decayed stonework, which it is hoped will be of use to architects. The Science Committee desires to place on record its appreciation of the assistance which Mr. Powys, the Hon. Secretary of the above Society, gave the Committee in the preparation of the above article.

Tests on the Weathering Properties of Building Stone.—It may be recalled that a few years ago the authorities of the Geological Museum in Jernyn Street offered to carry out certain weathering tests on the roof of the Museum on samples of various building stones, and invited the co-operation of the Science Committee in the carrying out of such tests. During this last session two members of the Committee visited the Museum and inspected the samples undergoing these tests, the procedure being fully explained to them by the Curator and his assistants, and they report "that the tests are being made on the most careful lines, and the information thus obtained will be of great value." They also suggest that annual inspections of these stones should be made during the next five or ten years, and that a brief record be inserted in the Science Committee's records after each inspection.

English Forestry.—Correspondence has passed between the Science Committee and Mr. Duchesne, the Hon. Secretary of the English Forestry Association, with the object of bringing to the notice of architects information regarding the available English timber supplies, and a short notice to this effect has been inserted in the R.I.B.A. JOURNAL.

White Paints.—Several communications have been received by the Science Committee during the past session on the subject of white paints, which are of interest in view of possible legislation in the near future. A short list of Papers recently given on this subject has been entered on the Minutes.

Evidence was given by two members of the Science Committee before the Departmental Com-

mittee at the Home Office dealing with paints as used for builders' work, and subsequently at the request of the Chairman, Sir Ernest Hatch, Bart., a further statement of the views of the Committee was made upon the use of lead paints. It is believed that the Institute was approached on this important matter on account of the Committee's recent publication on Paint Material.

Defective Roofing Tiles.—In the last Annual Report of the Science Standing Committee reference was made to the work of the Sub-Committee which was appointed to consider the causes of the defects so frequently found in roofing tiles. This Sub-Committee has held further meetings and additional interesting specimens of roofing tiles have been received and examined, and a report has been presented to the Committee and certain recommendations therein contained forwarded to the Council, and approved by that body.

The informal meeting of architects and manufacturers which Mr. H. Greville Montgomery offered to arrange on the occasion of last year's "Building Trades Exhibition" was duly held at Olympia on April 16th, when several members of the Committee attended and contributed to the discussion.

The Science Standing Committee has offered to arrange for a series of short Papers dealing with "Roofing Tiles and their Defects" to be read at a meeting of the Institute during the ensuing session.

L.C.C. Drainage By-laws.—The Sub-Committee appointed to consider the by-laws made under the Metropolis Management Act (1855) and the Public Health Act (London) (1891) held further meetings, and duly reported to the Science Committee. The Science Committee has carefully considered the Report and sent it, after some emendation, to the Council. At the request of the Council the Hon. Secretary wrote to the Clerk of the L.C.C. requesting that the L.C.C. would give the Sub-Committee an opportunity of being heard when the revised by-laws are being drafted, and a reply was received to the effect that any proposals the Institute may desire to put forward would be considered if it should be decided at any time to revise the by-laws in question.

Construction of Belfries and Effect of Vibration on Buildings.—The Committee has had under consideration the subject of construction of belfries and the effect of vibration on buildings, and has appointed a Sub-Committee to deal with the matter. This Sub-Committee has held several meetings and it is hoped that data will ultimately be published likely to be useful to architects having belfries and similar structures to deal with, or cases of vibration in buildings.

Reference Index.—A suggestion having been put forward by a member that a reference index should be prepared of journalistic and other articles on subjects of special interest to the profession, a Sub-Committee was appointed, and duly considered the proposal, but reported that it was inadvisable to proceed with the undertaking.

Joint Committee on Reinforced Concrete.—In pursuance of the recent resolution of the Council, the Joint Committee on Reinforced Concrete having become a Sub-Committee of the Science Standing Committee, the Science Committee has re-elected the Joint Committee, which has much important work yet to do.

Timber Specification.—The Sub-Committee appointed by the Council to consider and deal with the Specification of Timber also became a Sub-Committee of the Science Committee in accordance with the above-mentioned resolution of the Council. This Sub-Committee has held further meetings and has presented its Report, which was duly considered, slightly amended, and sent to the Council.

Waste Pipes from Lavatory Basins in the Metropolitan Water Board Area.—Urgent representation having been made to the Institute by the majority of the firms supplying sanitary appliances in London and the district as to the onerous and vexatious restrictions of the Metropolitan Water Board as regards lavatory basin wastes, the Science Committee (to whom the matter was referred by the Council of the Institute) appointed a small Sub-Committee to meet the manufacturers and hear their views.

At the request of the Committee this deputation drafted a letter, which it was proposed should be sent to the Council with the recommendation that it be sent to the Solicitor of the Water Board. The draft letter, after being considered by the Committee, was approved and sent to the Council.

Researches on Timber.—In the last annual report reference was made to the fact that the Council had, on the suggestion of the Science Committee, memorialised His Majesty's Treasury with a view to obtaining a grant for investigation upon problems connected with timber, the solution of which would benefit architects. Though any definite reply to this memorial is still awaited, this action has at least brought the Science Committee through Government channels into touch with the Cambridge Forestry School, which, under the direction of Mr. E. Russell Burdon, is carrying out a series of most useful researches. At Mr. Burdon's request the Committee formulated a series of problems, the solution of which it was considered would prove of great value to all who have responsibilities in connection with timber; and not only have these suggestions been referred to in the Report of this School to the University Senate, but some of the lines of work put forward have been taken in hand. The attention of architects is therefore directed to the reports of this Forestry Centre.

Among other matters dealt with in the course of the Session on which advice has been sought, or which are still under investigation, may be mentioned :—

- | | |
|--------------------------------|--------------------------|
| (a) Stains on Portland Stone. | (d) Factory Lighting. |
| (b) Killing "Worms" in Timber. | (e) Lead Roof Coverings. |
| (c) Dry Rot. | |

REPORT OF THE TOWN PLANNING COMMITTEE.

During the past year the most important work of the Town Planning Committee of the Institute has been in connection with the town planning of London, with particular reference to the arterial roads, the Institute having strongly pressed for the creation of some authority able to deal with the matter in a comprehensive and effective manner.

As a result of the conference reported last year, at which representatives of the Royal Academy, the Institution of Civil Engineers, the Surveyors' Institution, the Institution of Municipal and County Engineers, and the London Society, met the Town Planning Committee of the R.I.B.A., the Prime Minister consented to receive a deputation at which an opportunity was given for putting before him the views of these bodies. As a result of the arguments there put forward, the Prime Minister suggested, as a temporary measure, that the different local authorities and professional bodies should go into conference with the President of the Local Government Board and see if some voluntary measure of co-ordination would be practicable to carry on till something more effective could be advised.

Mr. Asquith then said :—"On the larger question as to what authority—and I confess I am very much impressed with the view that there ought to be some authority—as to what should be the character and position and the precise functions of any authority which might ultimately seem to be the best fitted for the purpose in regard to the general survey of schemes of this kind, that is a matter which I should like to reserve for further consideration."

As a result of this meeting the President of the Local Government Board called a general conference, at which the R.I.B.A. was represented. At that conference it was decided that in order to study the details of the problem, London should be divided into six areas; and that district conferences, composed of representatives of all the different authorities affected, from the City to the outlying district councils, together with representatives from this Institute and other professional bodies, should be set up, and should study the problems of their district, collectively. There would thus be in each of these conferences representatives from the Government Departments and others who were familiar with the work of all the other conferences; in this way a commencement can be made of the study of the problem as a whole and the co-ordination of the Town Planning schemes. Representatives

of the R.I.B.A. have agreed to serve on the different conferences, all of which have now commenced their work. There can be no doubt that the action of the R.I.B.A. in calling together the other professional bodies and arranging a deputation to the Prime Minister has materially helped to focus attention on the importance of securing some central authority competent to deal with these problems.

In addition to this general work, small groups of the Town Planning Committee have been studying the individual proposals as to new arterial roads put forward by the Traffic Department of the Board of Trade, and they have prepared reports of these proposals which are being submitted to the district conferences.

Action is also being taken in connection with the different Town Planning schemes that are being prepared up and down the country.

REPORT OF THE AUDITORS FOR 1913.

We have carefully examined and checked the books and accounts with the vouchers for the year 1913, also the certificates and scrip of securities, and find that they agree with the balance sheet prepared by the Accountants.

It will be seen from the Income and Expenditure Accounts of Ordinary Funds that there is a very satisfactory balance for the year amounting to £1,302 1s. 9d., and that the interest on the overdraft for the year is £152 13s. 9d., in place of £274 3s. 10d. last year.

The bank overdraft this year is £4,846 7s. 1d., in place of £6,391 13s. 11d. last year, showing a reduction of £1,545 6s. 10d.

The expenditure account shows a net increase of £357 18s. 10d. compared with last year. This amount includes an additional grant of £100 to the Architectural Association and £26 5s. to the Crystal Palace Fund.

The income from the Galleries amounts to £312 6s. 3d., in place of £365 8s. 2d. last year.

The whole of the 1,100 shares in the Architectural Union Company are now shown in the Ordinary Funds balance sheet. Sixty-three of these shares were last year shown as the capital of the Ashpitel and the Anderson and Webb Trust Funds. The capital of these funds now consists of New South Wales Stock purchased from Ordinary Funds at a cost of £945.

During the last three years there has been a steady increase in the number of Associates.

If the satisfactory state of the finances of the Institute is to be maintained it is essential that all eligible Associates and Licentiates should be induced to become Fellows.

The settlement in connection with the winding-up of the Architectural Union Company is still incomplete.

The staff is fully entitled to the best thanks of the members of the Institute for the very efficient and careful way in which the account books are kept.

JOHN HUDSON [F.].

WILLIAM H. BURT [A.].

THE ARCHITECTS' BENEVOLENT SOCIETY.

The Council, it will be seen, are continuing their grant to the Architects' Benevolent Society, and they earnestly commend the deserving objects of this Society to the attention of members who have not as yet become subscribers.

FINANCES.

The Accounts of Ordinary and Trust Funds for 1913, prepared by Messrs. Saffery, Sons & Skinner, Chartered Accountants, and audited by Messrs. John Hudson [F.] and William H. Burt [A.], Hon. Auditors, follow overleaf.

Income and Expenditure Account of Ordinary Funds for the Year ended 31st December 1913.

[illegible]

Examined with the vouchers and found to be correct. - 30A March 1914. JOHN HUDSON [P].
WILLIAM H. BURY [A.]

Dr.	Balance Sheet of Ordinary Funds, 31st December 1913.				Cr.				
LIABILITIES.		£	s.	d.	ASSETS.		£	s.	d.
To Sundry Creditors—					By Investments at cost—				
Sundry	641 2 8				Architectural Union Co. Shares—				
Rent	1277 10 0				1037 Shares, cost as per 1912 Balance				
		1916	12	8	Sheet		15251	1	0
Bank Overdraft		4546	7	1	63 ditto, cost of New Stocks purchased				
Examination Fees anticipatory of election		346	10	0	to replace those held by Asplintel				
Subscriptions received in advance		129	3	0	and Anderson & Webb Trust				
Accumulated Fund—					Funds		945	0	0
Balance as per last Account	27475 1 0	1100						16190	1 0
Add Entrance Fees in 1913—					New Premises—				
Fellows	131 5 0				As per last Balance Sheet			19126	6 2
Associates	258 6 0				Debtors, Rent, Advertisements, &c.			174	3 4
		389	11	0	Subscriptions in Arrear for 1912		180	8	0
Arrears for 1913 (as per contra)	596 8 0				Ditto 1913		596	8	0
		28464	0	0				776	16 0
Less Arrears for 1912, since									
received or cancelled	237 0 0								
Furniture and Fittings									
bought	43 15 6	433	7	6					
		28030	12	6					
Add Surplus of Income and Expenditure									
Account for 1913	1362 1 3	29032	13	9					
		£36573	8	6					
								£36573	0 0

NOTE.—A fine of £7 per annum is payable every 14 years by the Architectural Union Co., Ltd., in respect of the premises held by them under a Lease from the Corporation of the City of London. Notice of renewal must be given at Michaelmas, 1921, and the fine of £18 paid. All the Shares of the Architectural Union Co., Ltd., are held by the R.I.B.A. or its nominees, as shown by the above.

SAFFERT, BONS & SKINNER,
Chartered Accountants.

Examined with the vouchers and found to be correct. 30th March 1914. JOHN HUDSON [P].
WILLIAM H. BURT [A].

Revenue Accounts of Trust Funds for the Year ended 31st December 1913.

Dr.	£ s. d.		Cr.	£ s. d.
ASHPITEL PRIZE FUND:—				
To Balance carried forward	79 10 9	By Balance from last Account	73 15 10	
		By Dividend on £305 1s. 6d. New South Wales 4 per Cent. Inscribed Stock (1922)	5 14 11	
	<u>79 10 9</u>		<u>79 10 9</u>	
ANDERSON AND WEBB FUND:—				
To Amount Paid, Visitor's Travelling Expenses	5 19 6	By Balance from last Account	242 7 1	
To Balance carried forward	248 14 11	By Dividend on £58 6s. New South Wales 4 per Cent. Inscribed Stock (1942)	1 3 3	
		By Dividend on £594 18s. New South Wales 4 per Cent. Inscribed Stock (1922)	11 4 1	
	<u>254 14 5</u>		<u>254 14 5</u>	
ARTHUR CATES LEGACY:—				
To Amount paid Prize-man, C. F. Butt [A.]	42 0 0	By Balance from last Account	71 11 8	
To Balance carried forward	73 5 6	By Dividends on £1160 4 per Cent. N.E. Railway Preference Stock	43 12 10	
	<u>115 5 6</u>		<u>115 5 6</u>	
DONALDSON TESTIMONIAL FUND:—				
To Cost of Medal	1 7 6	By Balance from last Account	15 0 9	
To Balance carried forward	16 14 3	By Dividends on £72 L. & N.W. Railway 4 per Cent. Con- solidated Preference Stock	2 12 0	
	<u>18 1 0</u>		<u>18 1 0</u>	
GODWIN BURBARY:—				
To Amounts paid, viz.:		By Balance from last Account	70 0 8	
C. Holden [A.]	20 0 0	By Dividends on £1030 Caledonian Railway 4 per Cent. Stock	38 10 0	
C. C. Brewer [F.]	20 0 0			
To Balance carried forward	75 2 8		<u>115 2 8</u>	
	<u>115 2 8</u>			
GRISSELL LEGACY:—				
To Balance carried forward	16 19 4	By Balance from last Account	3 8 6	
	<u>16 19 4</u>	By Dividends on £20 Gr. Sd. "B" Annuity Great Indian Peninsula Railway	13 10 10	
			<u>16 19 4</u>	
LIBRARY FUND:—				
To Purchase of Books, Binding, etc.	140 9 4	By Balance from last Account	1 10 1	
To Petty Expenses	4 18 6	By Entrance Donations of 2 Hon. Associates	4 4 0	
To Balance carried forward	10 19 9	By Annual Grant from Ordinary Funds	150 0 0	
	<u>156 7 7</u>	By Fines, etc. (Loan Library)	0 13 6	
			<u>156 7 7</u>	
OWEN JONES STUDENTSHIP:—				
To Amount paid to A. W. Bellis	50 0 0	By Balance from last Account	165 4 9	
" " W. O. Miller	10 10 0	By Dividends on £2123 Midland Railway 2½ per Cent. Stock	50 2 0	
" " W. Harvey [A.]	60 0 0	By Dividends on £1247 G.W. Railway 3 per Cent. Con- solidated Stock	58 14 4	
To Balance carried forward	153 11 1		<u>274 1 1</u>	
	<u>274 1 1</u>			
PEPIN MEMORIAL FUND:—				
To Deficit from last Account	15 4 4	By Dividends on £1070 L. & N.W. Railway 4 per cent. Con- solidated Preference Stock	40 8 2	
To Amount paid to J. McGregor	20 0 0	By Balance carried forward	16 5 8	
" " W. Paterson [A.]	20 0 0			
To Cost of Medal	1 9 6		<u>56 13 10</u>	
	<u>56 13 10</u>			
SAXON SKELL BEQUEST:—				
To Amount paid to Vincent Hooper [A.]	30 0 0	By Balance from last Account	153 15 3	
To Balance carried forward	146 15 5	By Dividends on 1898 4s. New Zealand 3½ per Cent. Stock	23 0 2	
	<u>176 15 5</u>		<u>176 15 5</u>	
TITE LEGACY FUND:—				
To Amount paid to Cyril E. Fahey	50 0 0	By Balance from last Account	27 11 6	
" " L. de Solomons	20 0 0	By Dividends on £1150 2½ per Cent. Consols	27 1 8	
To Balance carried forward	4 13 1		<u>54 10 1</u>	
	<u>54 13 1</u>			
WIMPEY BEQUEST:—				
To Amount paid to Chas. Holden [A.]	12 10 0	By Balance from last Account	147 13 7	
" " C. C. Brewer [F.]	12 10 0	By Dividends on £1024 18s. 8d. Metropolitan Water Board Stock	28 19 0	
To Balance carried forward	151 12 7		<u>176 12 7</u>	
	<u>176 12 7</u>			
SAPPY, SOBS & SKINNER,				
Chartered Accountants.				

Examined with the vouchers and found to be correct. 30th March 1914.

{ JOHN HUDSON [P.]
{ WILLIAM H. BERT [A.]

Balance Sheet of Trust Funds, 31st December 1913.

Dr.		£ s. d.	Cr.		£ s. d.
To ASHPITEL PRIZE FUND:—			By Government and other Securities, being total value of Trust Funds invested at this date.....		
Capital—£295 12s. 8d. New South Wales 4 per Cent. Inscribed Stock (1922): Value at 31st December, 1913	302	0 8			9643 18 9
Balance at credit of Revenue Account	79	10 9	By Cash at Bank		961 13 8
To ANDERSON AND WERN FUND (Board of Architectural Education):—			By Pugin Memorial Fund :—Deficit on Revenue Account...		
Capital—£594 18s. 4d. New South Wales 4 per Cent. Inscribed Stock (1922): Value at 31st December, 1913 And £58 6s. New South Wales 4 per Cent. Inscribed Stock (1942): Value at 31st December, 1913	588	19 4			16 5 8
Balance at credit of Revenue Account	55	19 8			
To ARTHUR CATES LEGACY FUND:—					
Capital—£1160 N.-E. Railway 4 per Cent. Preference Stock: Value at December 31st, 1913	1125	4 0			
Balance at credit of Revenue Account	73	5 6			
To HERBERT BAKER SCHOLARSHIP:—					
Balance December 31st, 1912	82	10 0			
Amount paid Mr. Gordon Leith (A.)	82	10 0			
To DONALDSON TESTIMONIAL FUND:—					
Capital—£72 L. & N.-W. Railway 4 per Cent. Consolidated Preference Stock: Value at December 31st, 1913	70	11 2			
Balance at credit of Revenue Account	16	14 3			
To GOSWIN BERSARY FUND:—					
Capital—£1030 Caledonian Railway 4 per Cent. Debenture Stock: Value at December 31st, 1913	1030	0 0			
Balance at credit of Revenue Account	75	2 8			
To GRIBSELL LEGACY FUND:—					
Capital—£29 6s. 8d. "H" Annuity Great Indian Peninsula Railway: Value at December 31st, 1913	380	12 8			
Balance at credit of Revenue Account	16	19 4			
To LIBRARY FUND:—					
Balance at credit of this Fund	10	19 9			
To OWEN JONES STUDENTSHIP FUND:—					
Capital—£2128 Midland Railway 2½ per cent. Debenture Stock: Value at December 31st, 1913	1930	0 0			
£1247 G.W. Railway 5 per cent. Consolidated Guaranteed Stock: Value at December 31st, 1913	1508	17 5			
Balance at credit of Revenue Account	2838	17 5			
To PUGIN MEMORIAL FUND:—					
Capital—£1070 L. & N.-W. Railway 4 per Cent. Consolidated Preference Stock: Value at December 31st, 1913	1048	12 0			
To SAXON SNELL REQUEST:—					
Capital—£698 4s. New Zealand 3½ per Cent. Stock: Value at December 31st, 1913	614	8 4			
Balance at credit of Revenue Account	148	15 5			
To TITE LEGACY FUND:—					
Capital—£1150 2½ per Cent. Consols: Value at December 31st, 1913	825	2 0			
Balance at credit of Revenue Account	4	13 1			
To WIMPERTS REQUEST:—					
Capital—£1024 18s. 8d. Metropolitan Water Board 3 per Cent. "H" Stock: Value at 31st December, 1913	763	11 5			
Balance at credit of Revenue Account	151	12 7			
	£10921	19 1			

SAFFERY, SONN & SKINNER,
Chartered Accountants.

Examined with the vouchers and found to be correct. 30th March 1914.

J. JOHN HUBSON (P.),
WILLIAM H. BURT (A.).

The Council submit an Estimate of Income and Expenditure of Ordinary Funds for the year ending 31st December 1914, exclusive of Entrance and Final Examination Fees:—

Dr.	ORDINARY EXPENDITURE	£	s. d.	Cr.	ORDINARY INCOME	£	s. d.
*Rent		1740	0 0	Subscriptions and Arrears		9150	0 0
Gas and Electric Lighting		150	0 0	Sale of Publications		750	0 0
Fuel		55	0 0	Advertisements		1000	0 0
Salaries		3000	0 0	Examination Fees		1550	0 0
General Printing, Stationery, Stamps, and Petty Expenses		1150	0 0	Use of Rooms		80	0 0
General Meetings and Exhibitions		220	0 0	Galleries		300	0 0
Housekeeping		300	0 0	Dividend from A.U.C.		1000	0 0
Advertisements		60	0 0				
Examination Expenses†		400	0 0				
General Repairs		200	0 0				
Fire Insurance		50	0 0				
Medals and Prizes		120	0 0				
Grants		915	0 0				
The JOURNAL		2000	0 0				
The KALENDAR		350	0 0				
Contributions to Allied Societies		540	0 0				
Legal and Accountants' Charges († New Charter)		250	0 0				
Presidents of Allied Societies		85	0 0				
Miscellaneous Expenses (including Dinner)		350	0 0				
Interest on Overdraft		120	0 0				
Estimated Balance of Ordinary Income over Ordinary Expenditure		1775	0 0				
	£13830	0 0			£13830	0 0	

*Should the premises be taken over from the Liquidator during the year, this item, "Rent," would be reduced, and further items for Rates, Taxes, Interest on Mortgage, etc., will be incurred.

† EXAMINATION EXPENSES.—No account is taken in this estimate of salaries, establishment charges, postage and stationery, extra assistance, and various other expenses in connection with the Examinations.

REGISTRATION BY CHARTER.

The Council's Proposals: Discussion at the Special General Meeting, 27th April.

In pursuance of the Resolution passed at the Special General Meeting of the 5th January 1914 [see JOURNAL, 17th January 1914], the Council have considered in detail the proposals for obtaining a new Charter and By-laws to enable the Royal Institute to constitute and maintain a Register of qualified architects, and at a Special General Meeting held on Monday, 27th April, with the President, Mr. Reginald Blomfield, R.A., in the chair, the following scheme was submitted for the consideration of the General Body:—

1. The Charter to enable the R.I.B.A. to constitute and maintain a Register of persons who have shown:

- (a) In the first instance by the possession of certain qualifications (see Clause 3),
- (b) In the future, and after the first establishment of the Register, by their having passed certain prescribed tests (see Clause 5),

that they are qualified for the practice of Architecture.

Fellows of the R.I.B.A. elected by the Council under Clause 2 of the Supplemental Charter of 1909 to be admitted to the Register without having passed the "prescribed tests."

2. All persons so inscribed on the Register to have the right to call themselves "Registered Architects," but only Corporate Members of the R.I.B.A. to have the right to call themselves "Chartered Architects."

3. In the first instance there shall be inscribed on the Register:—

- (a) The Fellows, Associates, and Licentiates of the R.I.B.A.
- (b) All such members of the Allied Societies in the United Kingdom as are engaged in the practice of Architecture and are recommended by those Societies and approved by the Council of the R.I.B.A.
- (c) Any person who shall prove to the satisfaction of the Council of the R.I.B.A. that at the date of the granting of the Charter he had been for at least two years engaged as a principal in the *bona fide* practice of Architecture, or had served for ten years as pupil, apprentice, or assistant, or partly as one and partly as the other, to a person or persons who at the date of the granting of the Charter is or are entitled to be enrolled on the Register; and who shall be approved by the Council of the R.I.B.A.

No applications for admissions to the Register under 3 (b) and 3 (c) to be entertained after three months from the date of the granting of the Charter.

4. Every Architect on the Register must sign a form of declaration prescribed by the Council.

5. The "prescribed tests" shall be the Examinations qualifying for admission to membership of the

R.I.B.A., and the fees payable for entering for such Examinations shall be identical with the fees payable by candidates for the R.I.B.A. Examinations. Candidates who have passed the Examinations shall be eligible for membership of the R.I.B.A.

6. An annual registration fee shall be payable to the R.I.B.A. by all Architects on the Register.

7. The Register to be administered by a Standing Committee of the R.I.B.A., whose functions shall be limited to supervision of the Register, to investigation of complaints in regard to the professional conduct of any person on the Register, and to reporting to the Council of the R.I.B.A. on matters connected with the Register only. The Committee's powers to be limited to reporting to the Council, by whom the required action will be taken.

8. Representation on this Standing Committee and for the specific purposes only as defined in Clause 7 to be given to Licentiates. In all other regards the constitutional position of the Licentiates to remain as at present.

9. The number of members of this Standing Committee not to exceed 21, in the proportion of 10 Fellows, 7 Associates, and 4 Licentiates, until such date as the class of Licentiates shall have expired.

10. The Council to consist of:—

- | | |
|--|---------------------|
| 1 President (Fellow). | } <i>Ex officio</i> |
| 4 Vice-Presidents (Fellows). | |
| 1 Hon. Secretary (Fellow). | |
| 5 Chairmen of Standing Committees (Fellows). | |
| 1 Chairman of Board of Architectural Education (Fellow). | |
| 15 Ordinary Members (Fellows). | |
| 10 Associate-Members. | |
| 2 Past Presidents (Fellows). | |
| 1 Representative of the Architectural Association (Fellow or Associate). | |

The President or other representative, being a Fellow of the R.I.B.A., of every Allied Society in the United Kingdom having not less than 50 of its members on the Register (or such other number as the Council may from time to time determine). [Allied Societies having less than 50 members on the Register to be represented on the Council in rotation.]

11. The R.I.B.A. to be empowered to issue a scale of fees payable to Architects on the Register.

12. The R.I.B.A. to have enlarged powers of holding property.

13. The By-law in regard to the Board of Architectural Education to be revised so as to confer upon certain Schools of Architecture the privilege of representation on the Board.

Notices of Amendments.

The following notices of amendments were on the paper:—

Mr. SYDNEY PERKS, F.S.A. [F.], to move:—"That Clause 10 be referred back to the Council for further consideration, a revised clause to be submitted to the General Body at an early date—it being distinctly understood that the Members of Allied Societies are not to have larger representation on our Council than our own Associates."

Mr. HERBERT A. WELCH [A.] to move:—" (1) That the following new clause be added to the proposals under consideration, viz.:

"That the disabilities imposed by previous Charters and the By-laws upon Associate members be repealed, and that Associates be permitted to vote on all matters connected with the management of the Institute, including the Charters and the By-laws."

" (2) And, further, that the Council shall acquire such powers as are necessary to enable them to ascertain the opinion of individual members of the Institute on all questions in regard to alterations of the Charters and By-laws."

Mr. S. DOUGLAS TOFFLEY [A.] to move:—"That Clauses 1 to 9 be referred back to the Council for further consideration and modification in accordance with the following suggestions:

"The Register to be controlled by a Registration Board composed of 21 Architects elected periodically by and from those whose names appear on the Register, not less than 11 being corporate members of the R.I.B.A."

"For a period of 6 months after the date of its first meeting the Board to have power to place upon the Register the name of any applicant possessing the qualifications specified under Clause 3 (b) and (c)."

"An Annual Registration Fee to be payable to the Board by all Architects on the Register."

Discussion.

THE PRESIDENT, having formally presented the draft proposals as above set out, said: There are one or two remarks I should like to make before we begin this important discussion. The first is in regard to the form in which these proposals have been put before you. The Council desire that there should be no misunderstanding as to what the nature of this document is. It is simply an attempt to put before members, in plain and business-like terms, the whole scope and character of the proposals involved in what we may call the Charter policy. The Council have not considered it their function to attempt to put these proposals into legal phraseology, and therefore they have not sifted out which of the proposals, if approved, should come into the Charter, and which into the By-laws. They have simply given this general statement of the position in order that all members—Fellows and Associates—should be able to express their opinion on the proposals as a whole. I say this in order to expedite business, so that we may not have verbal criticism addressed to this document. There is plenty of matter in it for serious consideration, and I will ask those who are going to speak to address themselves to the purport and substance of the proposals, and not to their precise verbal drafting. The other point I wish to put before you is in regard to what we may call the Charter policy as a whole. That policy, I think I may say, has been somewhat unfairly misrepresented. It has been said that the Institute, in putting before its members these proposals, is actuated solely by a desire to advance its own interests and to aggrandise itself. It is nothing of the sort, gentlemen. The Council may not absolutely have hit the nail in their proposals—though I do not admit that at all, it is a matter for discussion—but of the spirit which has actuated them in advancing these proposals there can be no question; they have endeavoured to solve the problem on broad and comprehensive lines. As an instance, I need merely call your attention to one clause—

Clause 3 (c)—which provides for the admission to the Register of persons who are neither members of the Institute nor of its Allied Societies. Therefore, it is not true to say that this is merely an Institute affair. I must go further, and say that I have been a member of this Institute for a good many years, and have watched its progress for a good many years, and I know something about it, and I do not think the position of this Institute is always duly appreciated. We are the one accredited representative body of the architectural profession in this country. Our successive Charters, our great tradition, the history of the past, and the facts of the present show that we, and we only, are the body who are entitled to deal with this very intricate problem, and to carry out the words of the resolution which was passed in this room unanimously at our last meeting—viz., "to submit a Petition praying his Majesty to grant a new Charter containing such further privileges and powers as are required to promote effectively the advancement of architecture by enabling the Royal Institute of British Architects to register and to distinguish persons qualified to practise." There is a great deal to be gone into and considered before that is worked out, but to the general position I hold very strongly indeed, that we, as the accredited representative body of architects in this country, are the body to deal with this very difficult and important question. And, gentlemen, I have had the great honour to occupy this chair for two years, and shall shortly resign it to my successor. During that period I have done my best to maintain the prestige of this Institute—(applause)—and I feel perfect confidence in the loyalty of all our members, that they will always do the same—(applause). Those are the few introductory remarks which I wished to make. This document, I need hardly say, contains many important proposals, and I suggest that we deal with them clause by clause. I shall, therefore, ask Mr. Peach to be good enough to move the first clause.

Mr. K. GAMMELL [A.]: May I ask, as an ordinary member of this meeting, whether it is proposed that every member present—whether Fellow or Associate—has the right, or will have the right, to vote on every single proposal brought before this meeting?

THE PRESIDENT: Yes; the Council are anxious that the questions should be discussed fully and from every point of view, and that members should have the whole situation in front of them. It is for this reason that the proposals have been put in this form, instead of being sifted out into Charter and By-laws. Therefore, on these proposals as now before you, all Fellows and Associates, we are informed and advised, can vote.

Mr. GAMMELL: I should, of course, be only too willing to accept your ruling, sir, but seven years ago a question was raised by Mr. Middleton in this room as to whether Associates had or had not the right to vote on matters affecting the Charter. The ruling was that they had no such power. ("No.") I cannot accept that correction. Mr. H. O. Danckwerts's opinion was sought, and it is recorded in the JOURNAL [27 July 1907, p. 619]. The learned Counsel simply quotes the words in our Charter, and said, in effect, that Associates are entitled as of right to vote on all matters affecting the Charter, but upon matters affecting the By-laws they have no right whatsoever. It seems to me that if you ask for a vote from Associates to-night on questions affecting By-laws you will stultify the rulings of the past. It is of importance, too, because it will create a precedent. I understand that Mr. Welch has given notice of an amendment which affects this matter very particularly, but if we have the right to vote on the By-laws Mr. Welch's proposal would not be necessary. I do not know whether it will appeal to you in that way. I am sorry to have to raise the point, but I think it ought to be cleared up.

THE PRESIDENT: We did consult our legal advisers as to whether or not Associates could vote on the document before you, and they advised that they could, and I think that is sufficient for the meeting—I am not a lawyer myself. These proposals have been drafted in such a way that they can be voted upon by the whole body of members.

MR. C. STANLEY PEACH [F.]: Before formally moving the adoption of the first clause, I would like to say a word upon the voting question which Mr. Gammell has raised. I think the present situation and the way in which these proposals have been put by the Council have been most carefully considered with the view to enabling Associates not only to express their opinion, but also to vote. These matters are brought before you as a policy; and on a question of policy, whether it ultimately affects By-Laws or the Charter, there is no doubt, I think, that the votes of the Associates can be given, and, as the President has told us, that is the opinion of our legal advisers. I will now move the adoption of Clause 1. This is, of course, a purely formal clause. It is giving effect, as clearly as the Council can, to the last three lines of the resolution which was unanimously adopted at the meeting of the 5th January—that is to say, to enable the Royal Institute of British Architects to register and to distinguish persons qualified to practise. There are two things involved in that. First, there is the act of constituting the Register, and, secondly, there is the continuing process of carrying it on. We think that that is expressed clearly in the words "to constitute and maintain a Register," and I think that no argument is now necessary in support of the clause, because we had it very fully from Sir Aston Webb last time, and the meeting expressed their opinion upon it. I therefore move that this be adopted.

MR. GEORGE HUBBARD, F.S.A. [F.], seconded.

MR. S. DOUGLAS TOPLEY [A.]: I have given formal notice of an amendment referring to Clauses 1 to 9. I adopted that course because these nine clauses are so intimately connected that it seemed unwise on an occasion of this sort to go into the mere wording and to suggest amendments to each clause. However, I may say that I and those for whom I speak have no objection to Clause 1, and whatever I may say subsequently I will not in relation to this clause press my amendment.

THE PRESIDENT: That is a reasonable course. You can raise your amendments, Mr. Topley, when points occur which you would like to amend.

MR. W. R. DAVIDGE [A.]: Before Clause 1 is put there is a point which might be necessary to consider, giving to the Council full power to alter it slightly if necessary. I suggest we might put in, after the letters R.I.B.A. "either alone or in conjunction with other bodies." My view is that the Council should have power to act alone if desirable, but it might strengthen their hands if they were given power to act if necessary in conjunction with any other body.

MR. A. W. S. CROSS [F.]: I second that.

MR. WM. WOODWARD [F.]: The question is whether the authorities who will have to deal with the Charter of the Royal Institute, and who might be willing to deal with the Royal Institute, would be equally willing to deal with bodies of whom they know nothing.

MR. SYDNEY PERKS, F.S.A. [F.]: I think it would be a mistake to pass such amendment, because we have a Charter, and we are the only body of architects having a Charter. I was advised once privately by a member of the Privy Council that it would be a mistake on the part of the Institute to attempt to extend the privileges of their Royal Charter to any body of men who were not within the purview of that Charter; it might be a dangerous thing to do. We are the only body of architects possessing a Royal Charter, and we want to remain the only body.

MR. DAVIDGE: My object in suggesting it was to give the Institute power to uphold the privileges of the Royal Charter and to constitute this Register, if they wish, in conjunction with other bodies, apart from the privileges which we hold under the Charter. It is to safeguard those privileges that I make the suggestion. It is difficult to bring it in when considering matters *seriatim*, and so I bring it forward now. We should retain that power to the last moment.

MR. PEACH: On behalf of the Council, I move that the amendment be not accepted. The suggestion is a valuable one, and the point raised is very important, but it is one

which requires very careful consideration; and perhaps it will satisfy Mr. Davidge if I say, on behalf of the Council, that it has been noted, and will receive very careful attention. I do not think the words of the clause as drawn would debar the Council from acting in co-operation with other bodies if found desirable or necessary, but it would unduly complicate the matter if put into words at the present stage. If that will satisfy Mr. Davidge, his suggestion has been noted.

MR. DAVIDGE: So long as it is to be considered, I will withdraw the amendment.

MR. HERBERT SHEPHERD [A.]: The last paragraph says, "Fellows of the R.I.B.A. elected by the Council under Clause 2 of the Supplemental Charter of 1909 to be admitted to the Register without having passed the 'prescribed tests.'" As I understand it, under the clause where you are admitting corporate members of the Institute, these gentlemen would naturally be elected; so I do not quite know why it is necessary to put in this. If they are Fellows they are entitled to come upon the Register.

THE SECRETARY: May I explain that in the first instance all the existing Fellows and Associates are put on the Register, but after the first establishment of the Register only those who have passed the Examinations can be admitted to it. An exception, however, is made in favour of those who are specially elected to the Fellowship as a distinguished honour hereafter.

MR. C. H. BRODIE [F.]: Say "elected hereafter by the Council."

THE PRESIDENT: Yes, "elected by the Council hereafter." Does that clear the point?

MR. SHEPHERD: Yes, Sir, that is perfectly clear.

Clause 1 as amended was then put to the Meeting and agreed to.

MR. PEACH: I now move that Clause 2 be adopted. *Prima facie*, this clause introduces what I may call highly controversial, not to say thorny, matter. The Council have given it their most careful consideration, and before and since the last meeting the views of all classes of members have reached them. This clause, then, has been drawn as an attempt to meet what the Council believe to be the general feeling of members. But we must remember that there is a class of members in this Institute—namely, the Licentiates—who, unfortunately, have no representation and no vote here; and we shall have to consider very carefully, later on, the position of these Licentiates, and there may be a strong feeling about it. The question does not really rest with this Institute as to whether there shall be one or two classes; it will, in the end, rest entirely with the Privy Council, and the view they take of it. And I think I correctly voice the views of everybody here present when I say that no class of members of this Institute have any desire to place any of their fellow-members in an inferior position, to their own aggrandisement; that although all of us are naturally very jealous of the position we have acquired, still there is no wish in this Institute, so far as the public are concerned, to cast a slur on those whom we have admitted to our professional membership, and therefore have said that we regard them as qualified architects. It is a very difficult question indeed, but no doubt when we get into close touch with the Privy Council, and find out what the Government is prepared to grant—for, after all, this is a gift, we can only suggest what we should like to have—this question will have to be most carefully considered. And the same remark applies to some other clauses which we shall come to later on. I remind you of that now, so that I shall not have to take up your time by repeating it when we come to those clauses. I think that, broadly speaking, there is a practicable scheme in this clause, and that if you pass it, when the Council come to put it into formal words in the Petition we shall find some way of satisfying both classes of members—that is to say, the Associate class and the Licentiate class. I therefore move the adoption of this clause.

MR. HUBBARD seconded.

MR. TOPLEY: There is some uncertainty as to how we stand on this clause. I understand it is impossible for this meeting to determine whether these titles shall be applied as we are here determining they shall be. Mr. Peach tells

us, quite properly, that it is subject to the ruling of the Privy Council. But Mr. Peach referred to Licentiates as members. [Mr. PEACH: Professional members.] We do not admit that Licentiates are members of the Institute. They are members of the profession. I want to make sure of this point. Does it mean that the Council, if the Privy Council suggests it, will give the Licentiates the same title as will be enjoyed by Associates?

THE PRESIDENT: I must ask Mr. Peach to answer that for himself. As he has said, the matter is not in our hands; the Privy Council will decide. We, here, may make a recommendation which your Council consider to be a proper one. I think the point Mr. Peach would make is that the Privy Council are the final arbiters in this and similar matters.

MR. PEACH: That is the point; you have put it quite plainly.

MR. TOPLEY: Mr. Peach suggests something in this clause which makes it different from other clauses which we are considering to-night, and I wanted to grasp what that difference was.

MR. C. H. BRODIE: Mr. Topley will be answered by the fact that whenever this is put into actual shape it must be submitted to the Institute for approval.

MR. MAURICE B. ADAMS [F.]: There is one point which is not met by these proposals, and I do not know whether I am in order in raising it now, though I do not know when else to raise it. As I understood at our previous discussion, one of the essentials we must go for if we are to obtain any advantage from the State in this matter is that the Licentiates, now to be called "registered architects," should have some form of representation on this body; and that does not appear to have been provided for. Could you tell us why that has been dropped? I am induced to inquire because much point was made of it, and some difficulty was felt with regard to it as to how these men, who are subscribing members, could be said before Parliament to have representation. I made a suggestion, if you will remember, to the effect that we should constitute these professional members into a sort of Convocation, with power to represent their views to the General Body, or to the Council, and that the Council should determine whether the recommendations they were making could be adopted or not. I understand that in the educational world there is some such rule. Our legal advisers seem to have strongly insisted that we shall never get anything from Parliament—or shall we say, the Privy Council—unless we give some power of representation to all classes who are paying subscriptions. I am merely asking for information, this problem does not appear to have been met by the Council's programme, as we have it now on paper. If you could throw some light on that, I think it would be advisable.

THE PRESIDENT: There is Clause 8 to which I would call your attention—representation on the Standing Committee, and for specific purposes, to be given to Licentiates.

MR. ADAMS: But that has to do merely with this registration business. There must be numerous questions, surely, which the Licentiates feel very strongly about, in ordinary matters of practice and business routine, and they should be allowed to come together, and have meetings, and discuss questions of policy or politics, and they should be able to represent to the Council what occurs to them from their point of view. Clause No. 9 deals with more specific business.

THE PRESIDENT: No. 8 is the one I suggested. You suggest there should be some Convocation?

MR. ADAMS: I suppose it was considered too wild an idea, but it was the one I thought of. I agree that you must extend the position of the Licentiate class so as to get in a larger body of men who are practising as architects. I recognise the difficulty that the Associates feel, and I do not wish to ignore it; but I do think that you must include a larger number of persons of uncertificated class, most carefully selected. Evidently you must have them if you are going for registration. Perhaps I ought to have asked the question before the first Clause was passed; but I should like to know whether what is now proposed is intended to supersede statutory registration, or whether it is to lead up to it. I understood

Sir Aston Webb that we were to prepare the ground by doing this work by Charter, and then go in for statutory registration.

THE PRESIDENT: I take it that that would depend on the course of events. If this answers the purpose, it is not necessary to do anything more. I think that is the position.

MR. ADAMS: As I take that view, that is all the more reason why I should ask the question, because it clearly was put forward that if we did these things by Charter we should be in a better position to secure with more success that which many men feel very strongly we ought to have. But, whatever may happen as to that, I think we should make some headway in the matter if these people were given the power to voice their views; if they could have their meetings in this room, with their own chairman, and carry their resolutions, to be submitted either to the General Body or to the Council, it would be a healthy thing to do, and we should be able to say that everybody connected with this Institute has the privilege of representation in a true and vital sense.

MR. B. J. CAPELL [A.]: There is one point I should like to have clear at the beginning of this discussion. A number of Associates I have come into contact with have felt that the Council have made a real effort to meet the objections which some of us have felt to certain of the proposals in the form in which we have previously seen and heard them; we realised it was a real attempt to meet our wishes. And amongst the attempts perhaps none were more conspicuous than making a distinction in the proposed title for those who are corporate members of the Institute and those who are not. If this be a matter which is going to counsel, and counsel are to have it in their hands to make an alteration on so important a matter, it would be like giving them power, if re-drafting the Ten Commandments, to include or exclude the word "not." I ask whether it will be possible—because nobody wants to be an obstacle in this thing, we want to be unanimous if we can, for the prestige of the Institute and the benefit of the profession are the first things before us—will it be possible, if the Council find it necessary to modify this in any way, to have it again brought before the Institute to be considered in detail clause by clause before it is finally adopted?

THE PRESIDENT: It must come before the General Body again, so that anybody can move an amendment. This matter needs to be clear before all members. I apprehend that it may come before members much in the same form as at present, or it may come again when it has been finally sifted and drafted into the Charter and By-laws; but I take it upon myself to assure all members that these proposals are absolutely *bona fide*, in the sense that if members approve of them the Council will do all they can to give effect to them. Mr. Peach intimated, when he introduced this second clause, that the proposals were full of difficulties. There is the natural view of our own members, and also the possibly not less natural view of the Licentiates, and the Council have to do the best they can to meet both views. The result of their efforts is seen in the Clause before you. The Privy Council can go back on that and say you cannot do it, and then it would be outside our hands.

MR. JOHN P. BISHOP [A.]: These matters would come back to the Institute before being passed as a Charter? We can still go on with our own Charter?

THE PRESIDENT: Yes; until we get a new one we must.

MR. WOODWARD: I hope I am not saying a word against the opinion just expressed, but to my view, if we pass these clauses to-night, the principle of these clauses, they will be subject to expression in legal phraseology, and also subject to the views of the Privy Council. I take it there is no intention on the part of the meeting to have the matter brought before them again to discuss in detail, clause by clause, because then we should be getting no "forrader." The present proposals are to meet the practically unanimous wish of the Institute expressed a few weeks ago. I hope if we do pass them that, subject to the reservations I have mentioned, they will be considered as representing the considered opinion of the General Body of members.

MR. HORACE CURRIE [A.]: I think the whole body of

members at this meeting agree with the clause; but what Mr. Peach said made us feel uneasy.

THE PRESIDENT: Are you moving an amendment, Mr. Cubitt? We have a substantive proposal before us.

MR. CURITT: My amendment is that if the Council go to the Privy Council on Clause 2 and find that the Privy Council will not pass the clause in its present form, or substantially so, our Council should then come to the General Body of members and get a decision on the matter.

MR. HERBERT WELCH [A.]: I have pleasure in seconding that amendment, because sometimes questions of principle and detail become so involved that it is difficult to make up one's mind as to what is principle and what is detail. "Not" is a detailed word, but it can alter a whole principle. I think it should be clear what road we are going before we settle this question.

THE PRESIDENT: I understand the wording of our proposals must come back to the General Body, and so I take it that it meets your difficulty.

MR. CURITT: The Meeting, I think, feels this matter to be so important that it should be dealt with separately. We should know where we stand on this point, it should not come on with other matters. If there is difficulty in this, instead of going ahead with the Charter the Council should come to the General Body and get their decision as to what they wish the Council to do.

THE PRESIDENT: The difficulty is that we have to go to the Privy Council first and ascertain what their views are before we can confer again with the General Body.

MR. CURITT: The Privy Council may raise certain objections to the proposed Charter, and if one of the objections is to Clause 2 I suggest that the Council, instead of going further in the matter, should at once put the question before the General Body of members and obtain their decision. It is a businesslike proposal. Many of us feel so strongly on this question that we would rather continue with our old Charter than embark on a new one containing provisions to which we object.

THE PRESIDENT: I think that could be done; the Council under those circumstances would feel it their duty to come back to the General Body and say that the Privy Council would not agree to this proposed differentiation.

MR. CURITT: It is understood, then, that you accept my amendment.

THE PRESIDENT: It is not an amendment; it is what we are bound to do.

MR. CURITT: We want this matter dealt with separately, if necessary.

THE PRESIDENT: It would be better, I think, to come back with a general statement on the whole position, including the proposal in Clause 2.

MR. CURITT: We do not want the Council to come before us with practically a redrafted Charter and say, "Here it is; you must either take it or leave it as a whole."

MR. HUBBARD: The Council will send up these proposals in suitable form to the Privy Council, who will reply on the scheme laid before them. The Council will then submit this reply to the General Meeting, together with the redrafted petition.

MR. CURITT: That will cover my point.

MR. HUBBARD: Mr. Cubitt understands that the Council could not submit Clause 2 as a separate item to the Privy Council and ask their decision upon it, and then submit that by itself to a General Meeting.

MR. EDWARD P. WARREN, F.S.A. [F.]: Can you give us information as to the probable procedure of the Privy Council if they cannot accept these proposals *en bloc*? Is it usual for them to refer back the document clause by clause, or to refer it back as a whole with a statement of specific objections to individual clauses?

THE PRESIDENT: I suppose they would intimate their specific objections to particular clauses. I think the position is that the Privy Council will always advise us informally as to the likelihood of certain clauses being accepted or not.

MR. TOPLEY: Will it be possible when the Council, acting

on what has been done, have drafted the Petition they propose to present to the Privy Council, to obtain an informal opinion first, and then bring the whole document before the Institute, before applying formally to the Privy Council again?

MR. PAUL WATERHOUSE [F.]: If you put that as an amendment I shall certainly vote against it, on the simple ground which has been explained, that if such a deadlock occurs with the Privy Council the matter will be referred again to the General Body. We shall unduly complicate our application to the Privy Council if we pass this amendment.

MR. WELCH: It is not going forward as an amendment; it is merely an expression of opinion.

THE PRESIDENT: I think we had better leave it at that.

Clause 2 was then put from the Chair and agreed to.

MR. PEACH: I now propose that Clause 3 be agreed to.

MR. HUBBARD seconded.

MR. TOPLEY: In the amendment of which I have given notice I made reference to the last paragraph of the Clause: "No applications for admission to the Register under 3 (b) and 3 (c) to be entertained after three months from the date of the granting of the Charter." I cannot properly lay the argument before you at the present stage, because it is intimately concerned with the composition of the Registering Committee; but if you will allow me, when we reach that, to propose that this period should under certain circumstances be extended, I shall be glad.

THE PRESIDENT: It will meet your wish, I suppose, if the meeting agree to hold over that particular paragraph until you are able to address us on Clause 7?

MR. TOPLEY: If that can be done.

The Meeting intimated its assent.

THE PRESIDENT: It will be fully discussed, then, when we come to Clause 7. Subject to the postponement of the discussion on this paragraph, may I take it we agree to Clause 3?

MR. MAURICE B. ADAMS: Before you put that, I notice that in the list of Allied Societies there is a very varied way of describing who are members. Some Societies call their members "Associate Members," some call them "Fellows." Clause 3 says: "All such members of the Allied Societies in the United Kingdom as are engaged in the practice of Architecture and are recommended by those Societies and approved by the Council of the R.I.B.A." Then it is left to the Council to decide as to who shall come in as having been for ten years pupil, apprentice, or assistant; but it says "all such members of the Allied Societies." I raise this point so that we may understand exactly what it means. Do you mean that these members are to include Associate Members, who apparently may be unimportant persons or they would not be relegated to the positions they hold in the lists—or do you mean Fellows only?

MR. PEACH: The word "members" is used in this clause in the ordinary sense of the term, and however members are distinguished for the particular purposes of the Society will not affect the question. That word is to include those qualified to engage in the practice of Architecture; it would exclude those who are not *bona fide* architects.

MR. ADAMS: I am quite satisfied with that answer.

MR. DAVIDSON: Arising out of Mr. Peach's previous assurance as to Clause 1, and the question whether the Institute should proceed alone or in conjunction with other bodies—in order that Clause 3 should run with that, it should be made clear that all approved members of present or future Allied Societies are to be included. As at present stated, it applies only to our existing Allied Societies. I think we should leave the door open, if the Council see fit, to a later stage for other Allied Societies, and we should as far as possible keep the door open for the Council to negotiate, if they see fit. So long as it is understood that present or future Allied Societies are intended, that will meet my point.

THE PRESIDENT: It simply says "all such members of the Allied Societies in the United Kingdom." Other Allied Societies may arise.

MR. DAVIDGE: At present there are only a certain number.

MR. ERNEST NEWTON, A.R.A.: Would it meet the question if we were to leave out the word "the," and say "Allied Societies"?

MR. DAVIDGE: I think that would meet the case, and I think it should read "recommended by the Councils of those Societies."

MR. PEACH: It would be by the Councils, of course.

THE PRESIDENT: It is not desirable that we should discuss verbal amendments more than is necessary, unless there are essential points involved.

MR. HERBERT SHEPHERD [A.]: On sub-section (c) of Clause 3 I would like to raise one question. I understand that all the persons mentioned in this sub-section must be approved by the Council of the R.I.B.A., but there is no mention as to the age at which they may be admitted. I think it should be laid down as a guide concerning the policy which should be pursued that a man shall have reached a certain age before he becomes entitled to be placed upon the Register. A person might have gone into practice at 18, and the question would arise whether he could be brought upon the Register at the age of 20. I am sure the Council will do the right thing, but there is need for some guidance in the matter. No one can be admitted to the Fellowship of the Institute until he has attained 30 years of age, and no one to the Associateship until he is 21. A man could hardly be debarred from coming on to the Register, if it was statutory, if he had reached 21 years of age; but as the Institute is going to conduct its own affairs, as I hope it always will do, I think any guidance with regard to policy might be set out in that Clause.

THE PRESIDENT: You want a minimum age limit? We will note that. May I take it that with the omission of the word "the" before "Allied Societies," and that we defer for discussion the point about "three months" in the concluding paragraph, that with these exceptions the clause is approved?

The Meeting signified its assent.

MR. PEACH: I formally propose Clause 4: "Every Architect on the Register must sign a form of Declaration prescribed by the Council."

MR. HUBBARD seconded.

MR. TOPLEY: It would be more convenient to take Clause 4 with Clause 7. I think it would facilitate and economise discussion very much.

MR. PEACH: On behalf of the Council, I raise no objection to that. It would expedite matters. I formally move, then, that we defer consideration of Clauses 4, 5, and 6 until after we have discussed Clause 7.

MR. TOPLEY seconded the proposition, and it was put to the vote and carried.

MR. PEACH: I now formally move Clause 7. I know Mr. Topley has something to say upon it, and perhaps I can combine my remarks in introducing this Clause with any comment I may have to make upon what he says, and so save time.

MR. HUBBARD seconded the motion.

MR. TOPLEY: I desire to move an amendment, "That the Register be controlled by a Registration Board composed of 21 Architects elected periodically by and from those whose names appear on the Register, not less than 11 being corporate members of the R.I.B.A." That amendment to a certain extent applies to No. 9, that the Standing Committee shall be composed of 21, in the proportion of 10 Fellows, 7 Associates, and 4 Licentiates, until such date as the class of Licentiates shall have expired. In bringing forward this amendment I would say that we are not out to oppose the Council for the sake of opposing. We are genuinely anxious that the members of this Institute should forward the policy to which it is committed, that of voluntary registration. It will be convenient if you will allow me to speak of the profession as composed of two broad groups—viz., first, Members and Licentiates of this Institute and Members of Allied Societies; and, second, those who are outside that first group, whom I call unattached architects. The problem is to persuade those

two groups to come together on some common ground and work for the common good. To what extent will that be met by the proposal before us? The suggestion is that we should invite practically every practitioner in the kingdom. An excellent and worthy scheme. But an invitation is one thing, and getting it accepted is another. Will they respond? As this proposal stands at present, we believe they will not. We are asking men to come into a scheme, and be controlled by an authority, that of our Council, on which they are not represented, and over which they have no control. If I may say so without offence, no independent-minded man will put himself into a position so humiliating, and, if we are to succeed in attracting these unattached architects—and it is most desirable that we should do so, and that we should attract as many as possible—it must be made clear that while this Institute must be "top dog" right through, we want to treat every practitioner with perfect fairness, and treat him as a reasonable and rational being. The proposal that we want to lay before you for consideration is this: that the Committee administering the proposed Register shall represent every type of architect who may come on to the Register under Clause 3. But the proposal goes further than that. Not only do we want them to be represented, but it follows from what I have said that they must have some executive power. We therefore propose in the amendment that I have read, that the Register shall be controlled by that Committee, and inasmuch as it is not consistent with the policy of this Institute for a Standing Committee to have executive power, we regard that status and title as inappropriate, and suggest the name "Registration Board." I submit in all seriousness to this meeting that the position of the Institute will be adequately safeguarded by the fact that at no time will it be possible for the members of this Institute to be represented on that Board by less than a majority of members; we lay it down that there are never to be less than 11 Corporate Members. If that be not considered sufficient, I would point out that as time goes on all applicants for the Register must have passed the prescribed tests, those tests being the examinations of the Institute. So while we have never less than 11 representatives on that Board, as time goes on that majority must increase, so that very shortly it will absorb the whole. But by being just to the unattached men in this matter, we shall have attracted them, and it is necessary we should, if we are to secure peace within the profession. Furthermore, if the fact that there must always be a majority of our own Corporate Members on the Board does not remove the fear of danger to this Institute from any influence of members who are not with us, then that fear can be obliterated by stating more definitely than is stated already the precise functions of the Registration Board. They can be stated briefly and comprehensively. Firstly to invite applications for the Register, and secondly to inscribe on the Register the names of those who possess the qualifications which are clearly defined in these proposals. Thirdly, it will be necessary for the Board to formulate some code to regulate professional conduct in the case of those on the Register, and they would be empowered to remove from the Register the names of gentlemen who violate that code. With regard to the third, who are the proper people to determine the professional conduct of men whose names are to be on the Register? I submit that the proper men are the men themselves, or their elected representatives. We do not suggest that Mr. Jones should be a law unto himself in determining what he shall do—that is the present state of things. But when you have five thousand Mr. Joneses on one Register, in company with Members and Licentiates of this Institute and of members of Allied Societies, you can safely leave that large company to keep each other straight, and we suggest it is unnecessary to drive away men who might come and join in this, by compelling the Board to refer every question to our Council, who will represent a small section of those on the Register. For those reasons I move "that the Register be controlled by a Registration Board composed of 21 Architects elected periodically by and from those whose names appear on the Register, not less

than 11 being Corporate Members of the R.I.B.A." And with regard to the qualifications, I suggest that for a period of six months after the date of its first meeting the Board shall have power to place upon the Register the name of any applicant possessing the qualifications specified under Clause 3 (b) and (c). We here touch a delicate matter, which I will speak of in language which will not offend any susceptibilities. Among the unattached architects there are a large number of men who have no confidence in this Institute at all. It is a regrettable state of affairs, but one which we should take cognisance of. These men, when the Register is established in the first place, will have nothing to do with it. The object of this Clause is to give those architects a second chance of coming in. If the amendment I have moved is adopted, they will see, when the first Registration Board is formed, that although this Institute has, quite properly, a majority on that Board, yet they will also be represented; they will see in effect that we have been as good as our word, and some at least of them will be willing to join in. And under those circumstances, and with that object, we think it would be wise to leave this class open for six months, so that the door might not be closed against them until the last possible moment. (Applause.)

MR. CURTIS: I have pleasure in seconding the amendment proposed by Mr. Topley. He has put his case so well that I do not think there is very much further that I can say. But the point that I would like to emphasise is that this amendment is not in any way antagonistic to the Council's proposals; it merely carries the proposals one step further. The object of these proposals is to get a number of men on to the Register so that they can be controlled, and so that the profession can be consolidated. The greater the number of persons you get on the Register, and the higher the qualifications of these persons, the better it will be for the architectural profession. You have said, Sir, that the Institute in this matter is not acting in any way in its own interests, but in the interests of the architectural profession as a whole. I suggest that in accepting this, as I am sure we all do, the Institute will do well also to accept Mr. Topley's amendment, so that we shall not have, as we have in the case of Licentiatees, men attached in some way or another to, and controlled to some extent by, the Institute, without having any voice whatever in the affairs of the body which controls them. That has been latterly, in the last year or so, held to be a serious objection to the existence of the class of Licentiatees, and yet, on the face of it, there seems to be a proposal here again to have a special class of men in some way controlled by the Institute, without having a single voice on the body by which they are controlled. Mr. Topley has dealt very lucidly, I think, with the question of the composition of the Board, and he has pointed out how the position of the Institute will be safeguarded. If, however, the Institute were given the further right of being a court of appeal from any decision of this Registration Board, it would be better for the position of the Institute, and a Board thus constituted, having executive powers, subject to the right of appeal to the Institute, would attract men whom the present proposal would not attract, and it would safeguard the interests of members of the Institute, and of the Institute as a whole. On the question of time, I suggest that it should be extended at least for a period of six months. You will remember what happened in the case of the Licentiatees. We gave them a certain length of time, and we had then to call a meeting and take the trouble to give them further time. And I suggest that what happened in the case of the Licentiatees is a very good argument for increasing this period of three months to six months. Mr. Peach has said that he will reply to this amendment. We are yet in the dark as to what special advantages the Council's proposals have over the amendment. Possibly Mr. Peach, having listened to the very clear description of the proposals by Mr. Topley, may even now consider whether it is not possible for the Council to accept at any rate the principle of what has been put forward in the amendment.

MR. WOODWARD: It appears to me that the amendment

suggests an indefinite body for a definite body. I take it that the Standing Committee referred to in this Clause would be elected by the Royal Institute. And surely as much confidence should be placed in this Standing Committee, elected as I suggest, as in some indefinite body such as is suggested by the amendment. I trust the amendment will not be carried.

MR. ALAN E. MURBY [F.]: I foresee in the amendment before us some difficulties in the original constitution of the Registering Body, as no means would exist for the initial appointment of representatives outside the Institute until after the duties of the Committee had actually begun. This difficulty would, of course, be transient, but inasmuch as the work of the first stages would be of very great importance, involving the consideration of all cases of non-Institute men now in practice and applying, I think it is worthy of consideration.

MR. HUBBARD: I do not understand what Mr. Topley means, and I should like to ask him to explain. If I may try to reduce his proposition to figures, it seems to me we might have a Register which would have perhaps 9,000 members on it. Three thousand might be Corporate Members of the Institute, but the remaining 6,000 might, I understand, be outside the Institute, and not subject to the control of the Institute in any way. The Board controlling this Register, Mr. Topley suggests, should be 21. He suggests 11 only should be members of this Institute, and that 10 should be appointed by this body of, I suppose, 6,000 outside.

MR. TOPLEY: The whole of the members to be elected from and by those on the Register, but at least eleven of them Corporate Members of the Institute.

MR. BRODIE: You have not got a Register.

MR. TOPLEY: We shall have a Register within three months. At the end of that period the Council will arrange for the election of the Registration Board, and they will be elected by all registered architects.

MR. HUBBARD: I want to follow it out to its end. The 11 members of this Institute would be for all practical purposes balanced by the 10 men elected say by the outside architects. It does not seem to me that that would give a real assurance of the Institute's being always the predominant power. It would be as 11 is to 10, and it is nearly balanced, so I should be fearful myself that the Institute might lose its predominant position on that Board.

MR. MATT. GARBUTT [F.]: Mr. Topley's proposal is to do away with nearly all the differentiation between Members of the Institute and those who are not connected with it, and between the different classes of Members of the Institute, and between the Members of the Institute and the Licentiatees. His proposal to put upon this Board 10 gentlemen who are not connected directly with the Institute and 11 who are Members of the Institute is practically making them equal, and I think he started by saying that he and some who think with him want to see the Institute "top dog." That is not borne out by what he said afterwards. I think the Council's suggestion, embodied in the Clauses we are considering now, is altogether preferable, and that this meeting ought to reject Mr. Topley's proposal altogether.

MR. J. A. GOTCH, F.S.A. [F.]: There is one danger in this proposal, and that is that we should have two bodies governing the architectural profession; we should have the Institute and the Registration Board. I think we ought to hesitate before we accept that position, because the Institute really ought to be the sole governing body. And then there is another point. This Board of Registration would have merely administrative functions. It would not be able to initiate or pursue any policy. That is admitted *as hypothesis*. Therefore it seems to me there would be no inducement to this great body of architects who do not belong to the Institute to take any part in the election of members to that Board, because there would be no question of policy which they could influence; they could only influence the personnel of an authority applying certain definite and accepted rules and regulations. Therefore I do not think the proposal would eventuate in the manner which Mr. Topley suggests. There would be no enthusiasm in the election. And there is another

point which occurs to me—viz., that under the proposition the Board of Registration would have what we may call the morality of the Registered Architects under its care, and the Institute would have the morality of its members under its care, and it is conceivable that there might be two standards of professional conduct set up. What seems to me the real inducement for men to come on to the Register is the fact that they will have a title, the title of either "Registered" or "Chartered" Architect. And that is what will induce them to join, and not the prospect of having a voice in the election of the Board of Registration. Therefore I think we should hesitate seriously before we do anything to set up a body which might eventually be a rival to the Institute.

MR. HUBBARD: It seems to me that if a Registering Board is set up it will have certain powers, such as determining the qualification of architects desiring to be registered. It should be impossible for the Board to institute its own form of examination, for instance. The powers and scope of the Board must be definitely determined in the first instance so as to preclude the possibility of the Board ever becoming a rival power to the Institute.

MR. TOPLEY: The powers will be defined in the Charter. We cannot go outside that.

SIR ASTON WEBB, R.A. [F.]: I should like to say a word on this amendment. It seems to me a very important matter that Mr. Topley has raised. I think it divides itself naturally into two distinct proposals—one as to the composition of the Standing Committee, and who should be represented on it; and the other that it should have executive power, and be independent of the Council. With regard to his first proposal, I am bound to say that, as far as I have been able to think about it, it does not seem to me an unreasonable thing, and in fact it may be desirable that some of the representatives on this Standing Committee who are to select gentlemen to become registered architects should not necessarily be members of the Institute. I think that it would create a good deal of confidence in those gentlemen who wish to be registered and who are not members of the Institute if they were to know that their case would be duly and properly laid before a mixed Committee when their names should come up. And it seems to me that some such provision might easily be incorporated in this clause. The Council do not say how that Standing Committee is to be composed, but if they say the composition of it is to be settled hereafter, or by ballot, or anything of that sort, it could be arranged that a certain number—I will not say how many; there is too much detail for it to be discussed to-night—might be members of the profession outside the Institute. But to go further, and say that this Committee is to act independently of the Institute, seems to me to be outside whatever occurred to us, outside what occurred to me at all events, as being at all possible. Are we going to throw over our Council, and say they are not to have a voice in this, that it is all to be settled by a body outside? We have very important Standing Committees, we have our Architectural Education Board, who have most important duties, but they make no objection at all to submitting their proposals to the Council of the Institute. I have not the honour of being on the Council, but I have perfect confidence that anything which is laid before them will be fairly and properly discussed. And surely the names of these gentlemen are such that there need be no fear at all that if they are proposed by the Committee the Council will, unless there is an exceptional reason, accept the names put before them. The Council of the Institute must be the executive body, and have executive power in anything which is done in this Institute, and I hope Mr. Topley will agree—I do not know whether the meeting will, but I hope Mr. Topley will—to accept that compromise, that we should see if it could not be arranged that a certain number of the members of the Committee, not members of this Institute, should be on that Board, but that of course their reports have to come to the Council and be passed by them, which is the universal practice in this respect. With regard to the question of time, that seems a detail, but I cannot conceive

why we should not make it six months, or even more. I should say we might very well agree to those points of Mr. Topley's, but it would be a disastrous and unheard-of thing that we should ignore our Council on a matter of such importance.

MR. EDWARD P. WARREN: It appears to me that this amendment is dangerous, because we are striving for simplification and cohesion; simplification of the rules of governance of the body architectural, and cohesion of its members, and this amendment seems to tend towards the adoption of complication and incohesion. It would create inevitably a body of those whom we may call for the purpose of discussion "extra-mural" members of the profession, and therefore would be likely to lead to the formation of that regrettable thing, a caucus, in the profession of architecture, and, almost inevitably, it would lead to wirepulling, and hostility to the objects which the Institute pursues, and possibly hostility to the Institute itself. I think it is altogether most undesirable.

MR. PERKS: Mr. Cubitt, in seconding Mr. Topley's amendment, cut away his arguments entirely. He said "subject to an appeal to the Council," and that is the whole thing. If you read No. 7, and put "the Registration Board" instead of "the Standing Committee," it is what Mr. Cubitt wants. That is the whole thing.

MR. B. J. CAPELL [A.]: The question of how many representatives should be necessarily members of the Institute is one to be thought over by the Institute, and fixed by them. It may be that you may think 11 and 10 are not a suitable proportion, but the principle involved in Sir Aston Webb's speech will, I think, meet Mr. Topley's views. There is one point which has not been looked at by many of the Members and some Associates. We feel that if this Board be a Board purely and exclusively of the Institute, it will give many of those who are on the Register who are not members of the Institute an opportunity of putting themselves forward very much as if they were, claiming for themselves all the kudos and all the credit of the Institute. That will not be the case very largely in London, where the distinction will be understood, but over the greater part of England it would be the case, and it will bear hardly on our country members if matters are so arranged that it is possible for people who have not taken the trouble to put themselves in the same professional position, to shelter themselves under the Institute and put themselves forward as of as much importance as those who have borne the burden and heat of the day. That is from the point of view of the members. From the point of view of the Institute itself, it would greatly strengthen the membership of the Institute in future if, membership of the Institute being considered a privilege and marked as such, it were worth the pupils' while not merely to be included on the Register, but to be members of the Institute. I appreciate much that has been said in the arguments on the other side. It is clear there are difficulties, but great thought should be given in this direction, so that the mere fact of being registered may not be mistaken for membership of the Institute.

MR. BRADIE: On Clause 9 you give the number of members of the Standing Committee, which is to be so many Fellows, so many Associates, and so many Licentiates, and I do not see how Mr. Topley's proposal can work before there is a Register. Therefore I throw this out as a suggestion, that if you add to that clause such words as the following, "four registered architects not being Members or Licentiates of the Institute, elected as soon as the first hundred registered architects are booked," it might meet the case. I do not know whether I make myself clear. You must start by making a Register, and as soon as you have a hundred registered architects, differentiating them from the others, I think those men ought to have the right to elect four, or whatever number of members may be decided, and that directly you have a Register those registered architects should elect a certain proportion of members of this Committee.

THE PRESIDENT: We shall have to come to that later.

MR. BRADIE: I suggest it now because I was hoping Mr. Topley would follow what Sir Aston Webb said, and that we should be getting along.

MR. STANLEY PEACH: I think Sir Aston Webb has thrown out a suggestion which will greatly help us in considering the amendment which has been proposed by Mr. Topley, and in my remarks I shall try to direct them to the two essential points of Mr. Topley's amendment—namely, the constitution of the Standing Committee, and the Standing Committee as an executive Board. I would first say that of course this proposal of Mr. Topley's is not new. It has received very full consideration. This question of an independent Board has been mooted over and over again whenever the question of Registration in any form has come up; and it has always been felt when the *pros* and *cons* have been carefully considered, that any *imperium in imperio* in this Institute would be most undesirable; in fact, it would be impossible. The objections are very serious indeed. As the proposals of the Council are put forward, it comes to this: that we are to have a Registration Board who will deal with all the architects on the Register, and that you then have an independent Board or body to take action and, as it were, to make a final judgment on any case which comes up from that Registration Board. And I think that when you come to consider it carefully you will agree that we could not devise any better system for insuring absolute fairness than to have the Council of the Institute as an independent authority to form the final judgment on any case which comes up to it. Mr. Topley suggested that the Council of the Institute will not command general confidence throughout the profession. I think Mr. Topley there is, perhaps, a little out in his facts. The whole history of the Institute proves that its Council does command the respect of the profession as a whole; it does not matter whether they are members of the Institute or not. On any great question of professional etiquette or fairness, such as would be involved in Registration, I do not think there are any architects in this country who would deny that the Council of the Institute is not only the legally constituted body to deal with architectural questions, but that it is also the most suitable and the fairest body for it. As to the constitution of the Standing Committee, I am glad to find that Mr. Topley and his seconder, Mr. Cubitt, both accept the essential fairness of the principle of representation. The Council are fully alive to the importance of representation and having an elected basis for those persons who govern the profession in any way, and I assure Mr. Topley that that point will not be lost sight of. Now with regard to the constitution of the Standing Committee, it is proper and, I think, very desirable that when the actual constitution of the Committee is worked out something will be devised to give representation to men who, we may say, are, as Mr. Warren described it, "extra-mural" members. But when we come to look at the suggestion as to the number of architects who are really independent of the Institute, it is not very large, and I think when the Registration scheme goes forward, and if we get this Charter, we shall find that the number will be almost insignificant; if, however, it is more than we expect, the difficulty of securing proper representation will certainly be dealt with. On behalf of the Council, I may say that all those suggestions which have been made regarding the constitution of the committees will be most carefully considered. But so far as making that Committee independent in any way of the Institute, or of the Council of the Institute, is concerned, I cannot accept that; and the Council will ask the meeting to support them in that view, and certainly to negative any suggestion which would create two independent authorities within the walls of the Institute.

MR. DAVIDGE: Will Mr. Peach accept the words "Registration Board" for "Standing Committee"?

MR. PEACH: A rose by any other name would smell as sweet; we have now an Architectural Education Board, but there is one objection, that we want to apply the electoral machinery as in the case of Standing Committees, and that makes it difficult.

THE PRESIDENT: We have had a very illuminating discussion on this point. Mr. Topley and Mr. Cubitt put their point with fairness and reasonableness, but I must say, for myself, speaking as a member of the Institute, that they have

not convinced me. And I would point out a certain illogicality in their position, because we agreed on the 5th January, and we have agreed again to-night, that it is the function of the Institute to constitute and maintain a Register of Architects. If that is so, there is only one body which can possibly do that, and that is the Council of the Institute. And if another body is constituted with independent control, our machinery falls to pieces. It has been pointed out by various speakers that there are difficulties which would arise. There is the question of control of professional practice; there is the question of our examinations—there would have to be a dual system of examinations; and altogether the interminable confusion which might arise in that way is almost paralysing to dwell upon. There are many other points of that sort which must arise, and they resolve themselves into one salient point—namely, that somebody has got to control this Register, and there is only one body which can ultimately control it, and that is the Council of this Institute. Sir Aston Webb said, and I agree with him, and I think the Council will also agree, on the question raised by Mr. Topley and Mr. Cubitt, that some representation of what Mr. Warren described as the extra-mural architect was desirable on this Standing Committee, and that is, to me, a very fair proposal, and I think it a matter which your Council should consider and try to draw up fresh proposals to meet. On the question of the extension of time from three months to six months, I have no doubt there is much to be said for that, and that also is a point the Council might well consider. But I feel very strongly that the Council of this Institute must have the last word in this absolutely vital matter.

MR. Topley's amendment, being put to the vote, was lost—22 voting for and 65 against it.

MR. H. V. LANCHESTER [F.]: Pursuing Sir Aston Webb's suggestion, I ask if the Council will leave out the words "of the R.I.B.A.," leaving it free under Clause 9 for further discussion?

MR. WOODWARD: I take it that the amendment is lost.

MR. LANCHESTER: I ask in an informal way. I gathered that that was the suggestion Sir Aston Webb made.

THE PRESIDENT: No.

MR. DAVIDGE: Can the words "Registration Board" be put in instead of "Standing Committee"? and the word "Board" appear instead of "Committee" in the last line but one? I appreciate Mr. Peach's contention, but the point is that they are to be partly elected by people who are not members of the Institute.

THE PRESIDENT: I do not know whether you grasp Mr. Peach's point, which is that a Standing Committee is elected.

MR. DAVIDGE: The Board will have to be elected.

MR. PEACH: There would be conflict with the Education Board, which is a nominated Board.

THE PRESIDENT: It would be more democratic to have it elected.

MR. DAVIDGE: A Standing Committee of the Institute is one thing, and a permanent Board which is elected by the Institute *plus* outside architects is another thing.

MR. PEACH: The difficulty of altering the name is that we have already in the constitution of the Institute an Education Board, and we have Standing Committees, and the Standing Committees are part of the constitution of the Institute, and are on an elective basis, whereas our Board of Education is a nominated Board; and if we use the same word to describe different things in that way we shall have some misunderstanding; we had better stick to well-understood terms. It is only another name for the rose, but it will be the same thing. It is better to keep to the name we are accustomed to, and the functions which appertain to that name. I suggest that we retain the name "Standing Committee."

MR. BISHOP: I do not see how it can be a Committee with men outside the Institute belonging to it.

MR. DAVIDGE: The whole point of this extra body is to get in as many people as possible from outside, and the intention is to create a favourable impression outside, to give the impression, which we know to be the true one, that this Board or Committee will treat outsiders and Institute members

fairly; it is intended that this impression shall be clearly conveyed to outsiders. If you call it a Standing Committee of the R.I.B.A. it will not have the same effect.

MR. SHEPHERD: How can we suggest that a Standing Committee of the Institute can have upon it any other than its elected members? Our Standing Committees are elected annually, with the exception of five members on each, who are nominated by the Council, and those must necessarily be members of the Institute. It is against the policy of the Institute to have any member upon a Standing Committee who is not a corporate member of the Institute. Therefore I suggest, with all respect to Mr. Peach, that the term "Board" would be much more distinct and helpful, and it would have a greater power of attracting men to the Register who are at present outside the Institute. It would be a fulfilment of the policy which has been put forward, and be a direct answer to those expressive words of Mr. Peach when he said, in December last, how essential it was that we should, in any further progress of political forces within this Institute, give power of representation to any man whom we ask to sign the Declaration. If you are going to get a professional brother to sign a Declaration, you must give him some form of representation. You would be stultifying the policy of the Institute for forty years if you do not do what is now urged, and I have much pleasure in supporting Mr. Davidge's suggestion.

MR. DAVIDGE: I feel that the words "Registration Board" would help the matter considerably.

THE PRESIDENT: The proposal only refers to those particular words; the rest of the clause stands.

MR. DAVIDGE: My proposal is that we use the words "Registration Board," instead of "Standing Committee." If you see any weak point in it, I shall be glad to know; I do not want to tie your hands.

MR. SHEPHERD: I suggest that if the Council find a legal difficulty with regard to this, they will thrash it out and bring it up again; and when it comes up it will be well explained, I have no doubt.

THE PRESIDENT: Now I will put it to you whether it shall be "Registration Board" (or "Authority") instead of "Standing Committee."

MR. NEWTON: Will you make it clear that it is an elected body? A Standing Committee conveys that impression. A Board may mean anything.

THE PRESIDENT: This must be considered; the Council will have to go into this a little more closely, because we have struck a fresh point to-night, a very valuable one—namely, the representation of the external architect. If you will leave that, we will vote on this now.

MR. ADAMS: Are you putting 7, 8 and 9?

THE PRESIDENT: I am dealing with 7, with the substitution of "Registration Board" (or "Authority") for "Standing Committee."

The Clause, amended as suggested by Mr. Davidge, was then agreed to.

MR. PEACH: I now take No. 5.

SIR ASTON WEBB: Have you not to settle the question of time in Clause 3?

MR. PEACH: I move that the concluding paragraph of

Clause 3 be approved, with the substitution of "six months" for "three months."

The motion was seconded by Mr. HUBBARD, and agreed to.

MR. DAVIDGE: Is it wise to limit it to six months?

Clauses 4 and 5, proposed by Mr. PEACH and seconded by Mr. HUBBARD, were put to the meeting and agreed to.

MR. PEACH: Clause 6 is a proposal that there should be an annual Registration Fee, payable to the R.I.B.A. by all architects on the Register.

MR. BISHOP: Fellows and Associates as well?

THE PRESIDENT: Yes, by all architects.

MR. PEACH: I hope you will all pass that.

Clause 6 was put and agreed to.

MR. PEACH: Clause 8 requires a few words. It is suggested that Licentiates should be given representation for specific purposes only. We have already this evening discussed the principle of representation of all classes up to the top; and I think some latitude should be given to the Council to extend the representation of Licentiates rather beyond what is given in this Clause, because when we come to consider the modifications of the scheme which will result from what has been discussed to-night, that Clause will require further consideration. Therefore I ask that it should not be limited by the words "for the specific purposes only"; and that you should leave out the sentence, "In all other regards the constitutional position of the Licentiates to remain as at present."

MR. WARREN: I second that.

MR. PEACH: There is no desire to alter the constitutional position in any way, but when you come to representation it will have to be considered, when outside persons are given representation. I think the Council should be left with a free hand on that. We understand the views of the Associates, and they meet with the greatest sympathy of the Council, but there must be some latitude. We should have our hands completely tied if those last words were passed.

MR. DAVIDGE: Will Mr. Peach accept words such as "other registered architects"? "Registered architects" covers Licentiates in future.

SIR ASTON WEBB: This is a detail which might be left for the moment. The by-laws must come up before the General Body for reconsideration after the Council have had an opportunity of considering this discussion.

MR. SHEPHERD: The majority of members of the Institute have no opportunity of voting upon the by-laws. That is a very serious matter, and one which, I think, is detrimental to the best interests of the Institute.

MR. NEWTON: These are difficult matters, and we should be fresher when we discuss them. I shall perhaps be very unpopular for doing so, but I beg to propose the adjournment.

MR. HUBBARD: I second the motion for adjournment. These matters are getting very complicated, and the issues are too big to be hurried through.

THE PRESIDENT: We have passed down to Clause 7.

MR. GORCH: Surely we can settle this about the provincial men now?

THE PRESIDENT: There is a definite proposal before the meeting that we adjourn, and I must put that.

There voted in favour of adjournment, 41; against, 38. The meeting then adjourned.

THE ANNUAL GENERAL MEETING.

Discussion on the Annual Reports of the Council and Standing Committees.

MR. GEORGE HUBBARD, F.S.A., *Vice-President*, in the Chair.

THE CHAIRMAN: We have adopted a new method in the Annual Report of the Council which is now submitted to you. You will find that the various clauses are numbered, and the Council have suggested that the Report should be put to you clause by clause. The first is the Obituary.

MR. HERBERT SHEPHERD [A.]: This is a new method of procedure at an Annual General Meeting, for which I was unprepared. I thought that at these meetings one had the opportunity of roaming freely over the different matters mentioned in the Report. But as you have put to us the obituary clause I think it would be unbecoming of us as an Institute to pass unnoticed the decease of one who had given loyal service to this Institute for something like twenty-seven years. I allude to the late Chief Clerk of the Institute, Mr. James Charles Tanner, who died on 15th January 1914. I suggest that some reference to his death should appear in the Annual Report.

THE CHAIRMAN: The Council will be pleased to make the special reference which Mr. Shepherd suggests.

MR. WM. WOODWARD [F.]: You have referred, Mr. Chairman, to Clause No. 1, but there is an important statement in the opening paragraph which enables me to make a few observations. I take it that the paucity of this gathering indicates the confidence of members generally in their Council, because this is the opportunity for members who desire to do so to find fault with, or to commend, the procedure of the Council during the past year.

THE CHAIRMAN: I may perhaps interpose one moment to say that Mr. Woodward has a sort of prescriptive right to your attention at our Annual General Meeting. His reference to the confidence you have in the Council is largely due to the fact that he no longer criticises the Report as an outsider, but as a member of the Council.

MR. WOODWARD: With reference to that, I am very sorry to inform members that by effluxion of time, and in accordance with the By-Law, this is probably the last time this Session that I shall have the pleasure to address you as a member of the Council. I have served my three years, and, in accordance with the By-Laws, I must retire for two years before another opportunity occurs for me to serve on the Council. In addition to that, which is a great trial to me, I am ousted also from the Practice Committee, under a similar By-Law, and shall have to wait for one year before I can serve on that Committee again. It may be, in the interval between this and possible re-election, that I may have the opportunity to revert to my old days and criticise the work of the Council. We know that increase of membership increases the work of the Council, and there are members present who have served longer on the Council than I have—Mr. Edwin T. Hall amongst them—who know the vast amount of valuable time which the heads of the profession devote to the Institute, in Committee, and in general work, of which members generally know very little indeed. Look at the increase of Committees since last year; we have the Constitutional Committee, the Reinforced Concrete Committee, Selection and General Purposes, Payment of Examiners, Paris Exhibition, Journal and Kalender, Town Planning, etc. These are in addition to the Standing Committees constituted under the Charter. You can well understand that these Committees get through a vast amount of work—whether you approve of their work is another matter. As regards membership, I am pleased to find there is an increase in all branches, as compared with last year, namely, 8 Fellows, 66 Associates, 2 Hon. Associates, and 10 Licentiates elected to the Fellowship. I think I shall have the meeting with me when I express the hope that we shall have a very considerable

accession of Fellows from the Licentiate class. With regard to the Examinations, I find that in the Final, 117 out of 213 failed and were relegated to their studies. Whether that means that the Examinations are too stiff, or that those who go up for them are not sufficiently well versed in the subjects dealt with, I do not know, but at all events it is a proportion which I think should not exist. With regard to the Final Examination, I took the opportunity to write a letter to the Chairman of the Board of Architectural Education on the subject of what I call specialisation, where the questions asked were such as, I thought, should not be put to young men just commencing their professional work. They were exceptional questions, rather of an engineering nature. But I have had a reply stating that on this very Construction Paper 76 candidates were examined, and 47 passed, showing a proportion of passes of something like 62 per cent. Still, it is for the examiners themselves to decide whether or not they are asking questions which are too stiff, and which some of us older ones would not be able to answer: I for one could not answer one-tenth of them. Being Chairman of the Finance and House Committee I should like now to touch upon the Financial Report. As I have said before, I can never hope to understand, or even to get on to the margin of understanding, an actuarial balance-sheet. Mr. Saffery, however, is here, and will answer any questions arising on the balance-sheets. The first item is Rent, £1,740 5s. It may surprise you to see this item. We have now purchased the whole of the Architectural Union Company's shares in these premises. But inasmuch as liquidators and lawyers and the Architectural Union Company—the whole of them, or some of them—have indulged in that procrastination which we are accustomed to when dealing with such bodies, it is not possible at present to tell the meeting that we are now perfectly free from every obligation with the exception of a mortgage of £4,000, which we were bound to continue in consequence of our having bought the Union Company's shares, as the security was on the premises. I feel I may say with confidence that if this Institute progresses financially in the satisfactory way in which it has done during the last two years, the Council will be able to announce in two or three years' time that the mortgage is cleared off, that the Institute is now free of every obligation, and that the whole premises are the Institute's own property. With regard to the Interest on Overdraft, £152 odd, last year that item was £274; showing how the debt is being reduced automatically as our finances continue to improve. Looking at the Ordinary Funds, the income is much the same as it was last year. On the Assets side you will see New Premises £19,426 6s. 2d. That sum is made up of £10,000 which we paid for these galleries, and the remainder was expended on important alterations and additions. Passing to the estimate of income and expenditure of ordinary funds for the year ended 31st December 1914, exclusive of Entrance and Final Examination fees, the actual expenditure in 1913 was £12,869 14s. 6d., and we have made an estimate for the present year of £13,830. I will now go back to the item dealing with grants. You will find a considerable accession of grants. In Clause 8 you will see the grant to the Architectural Association is £300, which includes £100 on account of the year 1912-13. The usual contribution is £100, and the extra £200 was in consequence of the Architectural Association being in rather low water financially; and one or two of the members of the Council were deputed to see the authorities of the Association—I myself was one of them—and we were convinced that it was a very proper addition to the £100 usually granted by the Institute to assist them in their excellent work. There is the item of £250 for the Exhibition of English Architecture in Paris. I have no doubt when this Exhibition is seen, and when we know that our Parisian confrères are putting their hands deeply into their own pockets to make this Exhibition a success, I think we shall agree that the Council were right in voting this £250. With regard to the Library Fund, careful examination convinced us that there ought to be an addition to that fund. The ordinary grant of £150 would not purchase the books required, and so we increased the grant to £200.

When you realise the increased use of the Library, and the enormous increase in the number of borrowers of books, you will agree that the increase of this grant was a very proper thing to do.

THE CHAIRMAN: It might be worth while to call the attention of members to the importance of our Library. This Library is, perhaps, the finest architectural library in the world, and it is important that the Institute should keep it in the forefront, and that can only be done by increasing the annual grant.

MR. WOODWARD: There is another grant: £105 to the St. Paul's Cathedral Preservation Fund. In regard to that, in subscribing this sum, the Council has been very careful indeed not to associate itself in any degree with the character of the work to be carried out. They have carefully refrained from expressing any opinion as to whether what is proposed is or is not the right thing. Then there is £26 5s. for the Crystal Palace, ten guineas for the Alma-Tadema Memorial Fund, and ten guineas for the Sir Robert Hunter Memorial Fund. There is a considerable increase in the amount of the grants, so that our surplus next year will be correspondingly reduced. But if the Institute is in the position indicated by the Auditors' Report, those are the things which I think we should support. The Institute is increasing in importance, both with the public and with members of the Government, and therefore though these are very large sums, I think we were justified in making the grants. The income from the Galleries was £312, in place of £365 last year. Perhaps the Secretary can explain the reason of the diminution.

MR. MACALISTER: We depend on tenants coming along from time to time: it is not a matter which is under our control.

MR. WOODWARD: That is all I have to say on the financial statement. If there are any questions of an expert character to be asked, Mr. Saffery is here, and will answer them.

THE CHAIRMAN: After Mr. Woodward's very lucid explanation, perhaps we might return to the programme which I suggested, which is that we should go through this Report clause by clause. With regard to No. 1 there is nothing further to be said except the remarks of Mr. Shepherd.

Clauses 1 to 7 were agreed to without discussion.

MR. SHEPHERD: With regard to the first item of Clause 8 "Grants," the Architectural Association, £300, it does seem to me that, in the best interests of the Institute, the Council would do well to consider the advisability of contributing to other of the important architectural schools in different parts of the country. There might be some cause of complaint at their being left out in the cold when one considers the large number of students and the influence exercised by the architectural schools in the provinces. I do not say that we should reduce the contribution to the Architectural Association, but it might be advisable to split up another two or three hundred pounds in grants, say of fifty pounds each, to the more important of these architectural schools. Again, I should like to have seen some larger contribution made to the Architects' Benevolent Society. I feel that if the Institute can afford to spend £250 on an exhibition of living architects' work, at least a like sum should be contributed for the widows and children of deceased members of our profession. I notice that the new British School at Rome received £50, and the British School at Rome, £21. Are they the same, or different bodies?

THE SECRETARY: The subscription of £21 is to the old British School at Rome, which is a purely archaeological body. We have subscribed that sum for a number of years, and it may possibly not be continued after this year. The £50 to the new British School is being paid on account of the architectural students there, to provide facilities for architectural study.

MR. FREDERIC R. FARROW [F.]: With regard to Mr. Shepherd's remarks, I would point out that the Architectural Association stands on a different footing from the University schools throughout the country. The latter are run as commercial ventures, and they can pay their way; but the Architectural Association is, and always has been, in the nature of a voluntary institution. The students there get

a great deal more than they pay for. In the University schools, they pay to the full extent for the education they receive; but this is not the case with the Architectural Association. Therefore I think it is right that the Royal Institute should continue to support the Architectural Association, in preference to any of the University schools.

MR. WOODWARD: I would say a word about the Architects' Benevolent Society. I agree with what Mr. Shepherd said, but the great desire of the Council of the Architects' Benevolent Society is that subscriptions should come from individual members of the profession. It is lamentable how few the contributors are, considering the numbers there are in the profession whose incomes would enable them to spare a small contribution to this most deserving Fund. We all know how that Fund is administered. The widows of men whom we have known in affluence come to us for help, and sometimes we have not sufficient to give what the circumstances demand, and what we would desire to give. Therefore, we would increase this grant from the Institute if we could afford it, but I appeal to members throughout the country to do what they can, and their help will be fully appreciated.

MR. EDWIN T. HALL [F.]: I should like to second what has been so ably said by Mr. Shepherd and Mr. Woodward. I ask whether it would be possible to attach to this Report a note urging Members of the Institute throughout the land to contribute to this Fund, because the Society is not a London Society alone, it gives grants all over the Kingdom. I remember some few years ago, when I was on the Council of the Society, that we had a case of an architect in a Northern town—which I will not mention more particularly, as it might disclose his identity. This man was so respected in his own town that he was three times mayor. Yet the case came before us because the family were so much reduced that we had to send £40 to prevent the selling up of the home. If you could put in the Report, or attach to it, an earnest request that every Member of the Institute should contribute some trifle, no matter how small, it would be a great boon. The pathetic cases which come before the Benevolent Society are such that they merit all the help which can be given to them.

MR. MATT. GARBUTT [F.]: In the matter of these grants, I hope the Council will harden their hearts until we are out of debt ourselves. I agree with the grant to the Architectural Association and the Architects' Benevolent Society, but as to other grants I hope there will not be any increase in them until we are out of debt.

THE CHAIRMAN: May I take it as an instruction from this Meeting that I lay before the Council your general expression of opinion that there should be some further grant towards the Architects' Benevolent Society, and more particularly, as Mr. Hall suggested, that a foot-note should be attached to the Report inviting members to do something towards supporting this really necessary branch of our work?

The Meeting signified its assent, and Clauses 8, 9 and 10 were respectively put to the Meeting and agreed to.

MR. PERCIVAL M. FRASER [A.]: With regard to Clause II, sub-section (3), is this the first intimation to members of the Institute's opposition to the Architects' Registration Bill?

THE CHAIRMAN: Yes.

MR. FRASER: I do not think the intimation should have come to members in that form. I should be the last person to support any Bill for registration, but I do not think the Council is in order in putting this in, that they have decided to oppose the Architects' Registration Bill. It is not pertinent to the Report, and I do not even see why they should oppose the Bill. It would suffice to let it go by default.

THE CHAIRMAN: The Council is certainly in order in putting this statement in the Report, because this is the Report of the Council to the General Body, and entering this opposition to the Bill is one of the things they have done.

A MEMBER: May I ask if the Council intend to spend much money on opposing? Does it come in the legal charges?

THE CHAIRMAN: We have not spent anything yet, and I think I can say for the Council that they are not likely to spend much.

Clause 11 was carried.

Mr. WOODWARD: On Clause 12 there are two things I would like to say. When we have cleared off our debt, I hope we shall have a substantial fund for the legal defence of those of our Fellows who are not able to defend themselves against unrighteous and unfair actions. We must have a substantial sum, so that a case can be taken from Court to Court, and if necessary to the House of Lords. I hope the Institute will devote itself seriously to this question of a Legal Defence Fund. The other thing which I hope we shall do, when we have cleared ourselves of debt, is the provision of proper lavatories and cloak-room in connection with our premises.

THE CHAIRMAN: With regard to the Board of Professional Defence, I am on that Committee, and it has practically completed its Report. Its recommendations are based upon the methods adopted by the Medical Union, and I can assure Mr. Woodward that if this Report is adopted, and the scheme which has been prepared by the Committee is carried through, members will be fully protected, and they will be able to carry cases to the House of Lords if necessary.

Mr. G. HASTWELL GRAYSON [F.]: This is a point which touches provincial architects very closely. In regard to several cases in the provinces, they have at the most gone to the Court of Appeal, and it will be very important to be able to carry a case to the House of Lords if necessary.

Mr. ALLAN GRAHAM [A.]: I think that in the end it will cheapen matters, because it will prevent clients who are vexatious and frivolous from bringing actions forward if they know that the Institute has behind it such a strong Committee and solid support.

Mr. GAMMELL: One of the matters which we had before the Board of Professional Defence was the statement made by the Secretary of the General Medical Defence Union, that over 75 per cent. of the cases which were threatened to be brought against members of that Union were entirely dropped when it was known that the Union would take up their defence. I think we have reasonable cause for assuming that something of that kind will obtain in regard to architectural matters.

Clauses 12 and 13 were carried.

THE CHAIRMAN: No. 14 concerns the Schedule of Charges. I hope we shall have a quorum at our meeting next Monday, and that we shall then complete this very much debated question.

Clause 14 was carried.

THE CHAIRMAN: No. 15 concerns the Official Architecture Committee, which has been doing a great deal of work, and made an exhaustive inquiry into the question through all the borough councils of the kingdom.

Mr. ADAMS: It seemed to me curious that you should be reporting against Official Architecture and yet that you should be inviting on to the Council representatives of the various official bodies.

THE CHAIRMAN: I do not think you will find there is any report against Official Architecture.

Mr. ADAMS: That is the purpose of this, as I understand.

THE CHAIRMAN: The Report is upon Official Architecture, not against it.

Mr. ADAMS: Does it not refer to salaried architects? In previous discussions here it has been rather deprecated that the Institute should encourage salaried architects.

THE CHAIRMAN: Until we have the Committee's full Report before us, we can hardly go into that.

Cl. 15, 16, and 17 were carried, and also the Report of the Board of Architectural Education.

Mr. SHEPHERD: As a London man, I would like to refer to the remark in the Art Committee's Report that "the rumour that Temple Bar was to be removed from Theobald's Park to a site in London proved to be groundless, as the owner informed the Committee that there is no such intention." I hope that before long that interesting monument will come back to London, and be put into a suitable position.

The Art Committee's Report was then agreed to.

Mr. E. H. WOODCOCK [A.]: I should like to ask about one point in the Literature Committee's Report. Some time ago, when our finances were not in a very sound state, it was decided that the publications of the Institute should be somewhat cut down, and the JOURNAL, I suppose, has had to share in that reduction. Perhaps it has been printed on somewhat cheaper paper. I want to ask whether the JOURNAL could not now be brought up to its old standard, because, in one respect at all events, the JOURNAL is all that many provincial members get from the Institute, and they look to its being maintained at a creditable standard.

THE CHAIRMAN: There has never been any wish or intention to cut down the JOURNAL.

Mr. SHEPHERD: Mr. MacAlister will remember there was a question with regard to the tremendous increase in the printing expenses of the Institute when the Supplementary Charters were under consideration.

THE SECRETARY: That was in connection with the general printing, quite apart from the JOURNAL.

Mr. SHEPHERD: There was a distinct saving in the alteration of the KALENDAR, and the provincial members were somewhat handicapped by that.

THE SECRETARY: There was a saving of space in the KALENDAR, but there has never been a cheapening in the JOURNAL, which has been kept up to the same standard right through.

Mr. ADAMS: There was a period when Mr. White was the Secretary, when the JOURNAL—or, as it was then called, the TRANSACTIONS—launched out and became a magnificent affair. It was a short series of eight volumes, and was a material improvement on the present series. I remember that when I read a paper on Architectural Drawing it had "inset" illustrations and was a most luxurious production. But the expenditure on the publications of those days had to be cut down. I was wondering whether the time has not arrived when, considering the competition there is among publications, the Institute could not advisedly, when they have the funds, revert to something like the standard which Mr. White inaugurated.

Mr. GAMMELL: I am interested to hear a member say that the JOURNAL is the one thing which provincial Members look for. I would ask whether he spoke as a London or as a provincial architect. That is an important matter, and it is a very pleasant surprise to hear it. It should be noted, because without such remarks it is difficult to know in what estimation the JOURNAL is held. I did not know the provincial members took so much interest in the JOURNAL.

Mr. WOODCOCK: I am in a position to speak both as a London and as a provincial architect, because I used to be in the provinces, and I know many men in the provinces, but I am now practising in London.

THE CHAIRMAN: There is no desire to cut down the JOURNAL. We feel on the Council very proud of it, and our thanks are due to Mr. Northover for the way in which he keeps it up to such a high standard.

Mr. PERCIVAL M. FRASER: May I refer to the Conditions of Contract? This and other useful matter have been cut out of the KALENDAR. It is the only book we have containing these matters. If we have not the information there it means going to the trouble of searching one's files to find it. At Committee meetings the KALENDAR is consulted every five minutes for some point or other, and it is a great inconvenience to find that the Conditions of Contract are no longer there.

Mr. WOODWARD: As Chairman of the Finance Committee I may say that the subject of reducing expenditure came before the Committee, and they thought that inasmuch as the Conditions of Contract could be purchased separately, there would be a saving in cutting them out of the KALENDAR.

Mr. FRASER: What was the idea? The saving of printing expenses, or to increase the sales of the Conditions of Contract?

Mr. WOODWARD: Both.

Mr. SHEPHERD: The next point is in regard to the Records Committee. The Report says, "The Committee have become annually responsible for the appointment of the three

following Committees: JOURNAL and KALENDAR, Records, and Sessional Papers." But there is no Report from the Records Committee at all. If they have done anything, they have not reported, or at all events their report is not published. Last year the Committee made a point of the fact that many of the younger members had applied to them for information as to the best buildings to measure; and the attention of members was drawn to the advisability of referring students who were seeking information to the Records Committee. I had an instance not long ago of a man who was making inquiries on a certain matter being advised to "Ring up the Records Committee." But he could not find any Records Committee, and apparently they have done nothing. Last year the names of members of the Records Committee were given in the KALENDAR, but this year they are not mentioned at all. Apart from that, I have personally an axe to grind. Some years ago I picked up a very curious old architectural scale, and I sent it some time last year to the Records Committee, but I have heard nothing about it since. If there is a responsible member of the Records Committee present, I should be glad if he would tell me what has become of that scale, or what they are doing with it.

THE SECRETARY: The Records Committee was not appointed this session until after the KALENDAR was printed, so the list of members of the Committee does not appear there. I asked the Honorary Secretary to send a report for insertion, but he said that for various reasons the work had been very slight, and that nearly all the work had been done through the Literature Committee, as most of the members belonged to that Committee. But many enquiries from students during the year have been attended to by them on the same lines as before.

MR. HERBERT A. SATCHEL [F.]: With regard to the Conditions of Contract, I suggest that if there is a general demand for them they could be printed in the same style as the KALENDAR, so that members could purchase them and put them in their KALENDARS from year to year, in the same way as was done by Mr. Fletcher with the Building Act and Supplementary Acts. That might bring money to the Institute and be a convenience to members. I speak as an official who frequently has to hunt for the contract form.

MR. MATT. GARBUTT: Would there not be an objection to printing the present Conditions, seeing that they are to be considerably altered? It would be better not to print them in the KALENDAR until they have been revised.

THE CHAIRMAN: The old Contract form is more or less in the melting-pot, and it is no use issuing that if it is shortly to be withdrawn.

THE CHAIRMAN: We now pass to the Report of the Practice Standing Committee, upon which Mr. Woodward, as the Chairman, has some observations to make.

MR. WOODWARD: I think it was understood, although that course has not been followed to-night, that the Chairman of each Standing Committee should move the Report of his Committee. I think that is the proper custom. In rising to move the Practice Committee's Report, let me commence with an apology to the District Surveyors' Association, which I hope they will accept, for this reason. You will see at the foot of page 8 a reference to the L.C.C. General Powers Act, 1909, and the form published by the District Surveyors' Association. That form was brought before the Sub-Committee, and it was agreed, after a friendly discussion, that the form, although very good in itself, ought not to be made to apply compulsorily to every small work; and the District Surveyors' Association agreed to withdraw the compulsory clauses, and to withdraw the words to which we raised objection, and they have published the new form without those words. The reason the matter is not mentioned here is, that our report was drafted before our Honorary Secretaries were aware of the letters we had received from Mr. Bernard Dicksee, amongst others, and they did not know exactly what had taken place. And that accounts for the paucity of this Report. So I hope this apology will

be accepted, and I think we may add to that the thanks of the Institute for the way in which the Association have treated this form. I ask that my remarks, or the gist of them, shall be added to the Report before it goes out to the members generally.

The Report was then agreed to.

MR. FARROW: I move the Report of the Science Standing Committee, and shall be pleased to answer any questions upon it.

MR. PERCYVAL M. FRASER: Is there any analogy between English Forestry and Timber Specification? What is the function of those two sections of the Report? What particular specification of timber is referred to, and what has the R.I.B.A. to do with English forestry?

MR. FARROW: The specification for timber has been drawn up by a sub-committee, approved by the Science Committee, and sent to the Council; it is the form suggested for the specification of timber, and it has been referred back to the Science Committee for further consideration.

THE CHAIRMAN: It is only on one clause that it has been referred back.

MR. FARROW: The English Forestry Association are endeavouring to promote the use of British-grown timber in England. The timber specification refers to the form which it is desirable for architects to use in specifying timber for their buildings. It applies principally to timber imported from abroad, from the Baltic and America. The researches on timber are a different matter altogether; they are researches which are being made by the Cambridge Forestry School, and are directed to the capabilities and possibilities of growing timber in England which shall to some extent take the place of what we now import from abroad.

THE CHAIRMAN: The most useful will be the timber specification, for there is a tendency for architects to copy antiquated specifications which do not apply to present conditions at all; in fact, the descriptions given of timber are in many cases erroneous, the ports from which it is supposed to come no longer exporting wood. It is therefore necessary that the specification should be brought up to date; and this report concisely informs the architect how the timber should be specified.

MR. FARROW: The researches on timber are connected only with timber grown in Great Britain—i.e., England and Scotland. Investigations are being made on various estates on which timber is grown, to ascertain what the usefulness of the timber is, how much it costs to grow, and at what price it can be sold in the English market. The Cambridge Forestry School does not deal with foreign timber supply.

MR. MATT. GARBUTT: I hope we shall soon get the result of the Science Standing Committee's labours in connection with timber specification; it has been a matter of difficulty for architects ever since I have had anything to do with architecture. The timber specifications were getting out of date twenty-five years ago; and certainly some of them that I have seen in recent years have been perfectly ridiculous. Some of the kinds specified cannot be got at all; and there are many difficulties which few architects know anything about. I have not seen the Science Committee's specification, but I expect they have had to be general and cautious in their wording. If their document when published could be accompanied by some comments, in the form of explanatory notes, it would be a useful addition.

MR. HASTWELL GRAYSON: When is the specification likely to be available?

THE CHAIRMAN: The specification came before the Council to-day, and was approved, but there was a note attached to it which the Council felt was not full or accurate enough, and the matter was referred back to the Committee on this point.

MR. SHEPHERD: I should like to ask a question with reference to defective roof tiles. At the bottom of page 10 it says: "A report has been presented to the Committee, and certain recommendations therein contained forwarded to the Council and approved by that body." I ask the Chairman of the Science Standing Committee whether he can give

members information as to when these recommendations which have been approved by the Council are likely to be issued, or, if they have been, where they are to be found in the JOURNAL of the Institute. And if they have not come before members, when they are likely to do so. It is a matter of great interest, I have no doubt.

Mr. STANLEY HALL: Is not the answer to that to be found on lines 4 and 5, page 11?

Mr. FARROW: The Committee propose to read a paper next Session, and bring in the report.

The Science Committee's Report was then agreed to.

Mr. LANCHESTER: I would like to make a brief reference to the Town Planning Committee's Report. You will see that a deputation waited upon the Prime Minister. The Prime Minister did not take exactly our view of the ideal conditions in regard to London, which was that a Government Department should take charge of London and its surroundings, and have the best professional advice on the general scheme; but he, with the late President of the Local Government Board and his successor, has now adopted the method of District Conferences to secure improvements in arterial roads by local Town Planning schemes. That is not a proposition we as an Institute would have put forward, for it is like designing a house by thinking about what mouldings to have on the doors. But we have tried to make the best of what the Government have given us. We obtained representation on the Conference in company with other interested societies, and on the District Conferences into which this has been subdivided. We are not in love with the method, but we shall make the best of it; it is the method which the Government approve, and which they are trying to put into operation. The Government felt the need of these arterial roads so much that they are considering, and will probably make, additional grants for this purpose from the National funds, to help out the local funds, which would be limited and would only reach road improvement by circuitous routes, under town planning, and such small grants as local authorities think it is desirable to spend for the purpose of encouraging traffic. This scheme is encouraging to us as architects, though not perhaps as taxpayers. I will leave that point, however, and mention that we are trying to encourage consideration of the architectural aspect in city improvements. We are in touch with Allied Societies on the subject, and both directly and through them we are taking an active interest in the architectural side of the town planning schemes which are being promoted throughout the country.

The Town Planning Report was agreed to.

Mr. FRASER, speaking on the Auditors' Report, asked when the contract for advertisements expired; £1,000 seemed an inadequate sum for the JOURNAL and KALENDAR advertisements, and the sooner it expired the better it would be for members.

THE CHAIRMAN: There are yet three years to run.

The Auditors' Report was then agreed to.

THE CHAIRMAN: The next item is Finances, and we will get our expert to speak on this matter. Mr. Saffery will, no doubt, be able to supplement what has been so clearly expounded by Mr. Woodward. I think we are in a prosperous condition.

Mr. SAFFERY: Yes, sir.

Mr. WOODWARD: Notwithstanding that 1900?

THE CHAIRMAN: My own mind rather boggles over that 1900; I thought it would be reasonable to take it as part of the profits.

Mr. SAFFERY: You have lived within your income, to the extent of £1,300.

THE CHAIRMAN: May I put it in this way: that we have expended this 1900 by borrowing it from the Bank?

Mr. SAFFERY: Yes, and therefore you have increased your bank overdraft.

Mr. FARROW: May we ask what difference there is in the interest? Do we get more interest out of the stock which we bought?

Mr. SAFFERY: You are getting no interest at all at present,

because you bought shares in the Architectural Union Company, and at the present moment the Company is not paying a dividend, because you are not paying rent to the Company. I happen to be liquidator of that Company, and I do not call upon you to pay your rent, but only to pay as much as is necessary to keep down the rates, insurances, and taxes. When the Company is wound up I shall call upon you to pay all that is due. There was an amount of £1,277 due to me as liquidator, but I did not call upon you to pay that, because it would mean increasing your bank overdraft, and I should owe the money. When the Company is wound up, which will probably be before the end of the year, or even before the end of the half-year, I shall call upon you to pay your rent, and shall pay you back the dividend, which is estimated at about £1,000, one cannot say exactly how much, because we do not yet know what the lawyers' costs will be.

Mr. FRASER: Is it not a fact that those trust funds derived their income from the Architectural Union Company's shares, and the shares were sold to the Institute, and New South Wales Stock was bought for the money?

Mr. SAFFERY: Yes.

Mr. FRASER: That does not affect the income and expenditure.

Mr. SAFFERY: No.

Mr. ADAMS: Is this rent, £1,740, the sum we are paying at present? And shall we soon cease to pay rent at all?

Mr. SAFFERY: Yes, that is the full rent for the year at the old rate which you used to pay to the Architectural Union Company. The Company is still in existence, but it is in liquidation. You must remember that as long as the Company remains in existence you are liable to them, or to the liquidator, for the rent according to the agreement.

Mr. FARROW: We hold all the shares in the Architectural Union Company, I suppose.

Mr. SAFFERY: Yes, you do.

Mr. FARROW: So we are the Architectural Union Company?

Mr. SAFFERY: No, you are not. You hold all the shares, but the Company is still a separate entity; it is still legally alive. Therefore, you are still liable for the rent. But when the liquidator is put out of existence, when the liquidator has summoned his last meeting, and the matter is closed down, I shall pass on the property to you, and the rent will cease.

Mr. ADAMS: How do we get the credit on the expenditure side of £1,740 5s.? How do we get credit for the nominal rent?

Mr. SAFFERY: The rent is charged against you; it is part of your expenditure. You will get the credit when I pay you back the dividend; but I cannot pay you dividend until you have paid your rent.

Mr. WOODWARD: You will find under the head of Ordinary Income "£1,000, dividend of the Architectural Union Company," which Mr. Saffery referred to.

Mr. SAFFERY: Yes, that is the estimated dividend, which I hope to pay you this year.

Mr. FARROW: With regard to the budget for the coming year, we have estimated amongst the Ordinary Income, Examination Fees, £1,550; and on the other side, Ordinary Expenditure, Examination Expenses, £400. Does the difference between those two items represent the net profit of the Examinations of the Institute, £1,150? Or does it include the Entrance Fees of Members? On the face of it, there is enough money to pay our Examiners for the arduous work they do in conducting these examinations, and I think it is time to consider whether we should pay our Examiners.

Mr. MACALISTER: The figure for Examination Expenses represents only a very small part of the cost of the Examinations. Nothing is allowed for salaries, establishment charges, and other expenses. It has been agreed by the Committee that the Examinations are conducted at a considerable loss.

Mr. FARROW: It is unfortunate that this document should go to provincial members without such an explanation.

Mr. MACALISTER: The same explanation has been made at Annual Meetings in past years.

THE CHAIRMAN: The whole question has been gone into carefully by the Committee, and it is felt that there will

have to be some readjustments made, so that the exact state of affairs may be shown in the accounts. At the present time it looks as if we were making a profit, but as a matter of fact we are making a loss, as would be shown if everything were charged up proportionately.

Mr. ADAMS: Would it not be possible, in publishing this Report, for a qualifying note to be added, so that Members generally may understand what we have been told? We have been told it before, but it would be putting the matter more fairly before the general body.

THE CHAIRMAN: The point shall be considered before the actual Report is published.

Mr. GARRUTT: There is another point which requires attention. The first paragraph enumerates the Boards and Committees, and says, "Particulars of the work of these Boards and Committees are embodied in the Report under various headings." The payment of examiners is referred to, but I do not find particulars of the work and payments for Examiners under that Committee or Board. Ought it not to say, "Particulars of the work of some of these Boards"? Otherwise it is misleading.

THE CHAIRMAN: Yes, I think that should be done.

Mr. FRASER: Under "Miscellaneous Expenses" I see "Annual Dinner Deficit, £80 5s.; Council Dinner Guests, £35 2s. 2d." What does the "Dinner Deficit" represent?

Mr. MACALISTER: That is the cost of the Institute Guests at the Annual Dinner. The Dinner Deficit is the cost of the Institute Guests at the Sessional Paper Dinners.

The Report was then put as a whole, and carried unanimously, the Chairman stating, on behalf of the Council, that the points requiring amendment would be attended to.

Mr. WOODWARD: May I take the opportunity of saying what I have had the pleasure of saying for many years before I was a Member of Council, concerning the work of our officials? During my three years on the Council, I have had opportunities of judging of the work which the officials do, and I have arrived at the conclusion that when we have taken an opportunity, as we have on various occasions, of raising the salaries of our officials, I have felt that that was an absolutely right thing to do. All these officials were thoroughly deserving of the increase in their salaries. With regard to Mr. MacAlister, I am astonished, serving as I do on various Committees, at his knowledge of every detail connected with the Institute. There is hardly a question one can ask him, whether it be with reference to the By-laws, or the Charter, or the work of the Institute or of any of the Committees, but he is able to answer it well and on the moment, so that one can understand exactly what he is explaining. And then we have our friend, Mr. Tayler, who has been with us so many years. I am sorry he is not here to-night, but I do not think he is well. Then we have Mr. Dircks. He is now recovering, and I hope he will soon have entirely recovered, from his attack of optic neuritis. He was here to-night, I am happy to say, and I hope he will be with us for many years, to continue the work which is so well done in connection with the Library. As for our friend, Mr. Northover, I am sure you will agree with me that it would be almost impossible to say too much in praise of the work which Mr. Northover has done in his editorial capacity, and the careful way in which he edits what we are pleased to term our speeches. I often have occasion to thank him for rounding off the corners of those remarks which one makes from time to time on the spur of the moment! There is another official, Mr. Baker, whom I would like to commend. I and our Chairman this evening, and all of us on the Council, have had opportunities of finding out the work which Mr. Baker does, and I can assure you that he is well worthy of all the encomiums we can pass upon his particular department. And one word as to our departed friend, Mr. Tanner. As Chairman of the Finance Committee, I can assure you that the Council, from the time he was taken seriously ill until the day of his death, took every opportunity to add to his comfort, and our last act was to contribute a sum of money to place a tombstone over his grave. And although I agree

with what has been said as to the absence of any reference in our Report to the death of Mr. Tanner, I assure you the Council have not been indifferent to the services rendered by him, and it has felt deep regret at his death.

Mr. GRAYSON: I have the rare opportunity, for a provincial man, of being on the Council. I have been on for two years, and though I cannot pretend to be as *au fait* with the Institute as Mr. Woodward is, I have been amazed at the number of letters which Mr. MacAlister has had sent to me in the course of the last two years. It has been almost a daily event to have something from the Institute, and so I judge the correspondence must be gigantic. The Council is a numerous body, and the Committees represent a large number of Members, and there are other Members concerned in the work of the Institute. Altogether the work is stupendous. I do not know what the postage can be, but the time given to the work by the officials must mean that they work abnormal hours.

THE CHAIRMAN: From the Chair I would like to make one remark. I do not want to pick out one apart from others, but I should like to say that from the highest, Mr. MacAlister, to the lowest, there is an unwavering sense of duty amongst all our officials. They are invariably most attentive, and carry out their work in an admirable manner. I am sure no institution is better served by its servants than the Royal Institute of British Architects.

Mr. ELKINGTON: There is one point I should like to allude to. I conceive it to be the duty and the pleasure of this meeting to accord a very hearty vote of thanks to our Honorary Auditors, Mr. John Hudson, *Fellow*, and Mr. W. H. Burt, *Associate*. Those members of our profession who can find the time to give their services freely to this Institute merit the heartiest approval we can give to them, and it is a great pleasure to myself to propose, and I think I am correct in interpreting the wishes of this meeting, that our heartiest thanks should be accorded to Mr. Hudson and Mr. Burt for the great services they have rendered to the Institute. Both of them have served for a period of years, and I for one feel great regret that we shall be losing their services in the year to come. I beg to move a very hearty vote of thanks to our Honorary Auditors.

The motion having been seconded and carried by acclamation the proceedings came to an end.

Streets and Buildings Control.

The President of the Local Government Board has appointed a Departmental Committee "to consider the control at present exercised in England and Wales over the erection of buildings and the construction of streets by means of by-laws and local regulations, and their effect upon building and development, and to make recommendations." The Committee consists of Mr. J. O. Herbert Lewis, M.P. (Chairman), Sir Randolph L. Baker, M.P.; the Hon. Eustace Fiennes, M.P.; Mr. A. E. Collins (the City Engineer of Norwich); Mr. E. V. Hiley (the Town Clerk of Birmingham); Mr. W. T. Jerred (an Assistant Secretary of the Local Government Board); Mr. Harding Newman (land agent); Mr. W. T. Postlethwaite (Clerk to the Swinton and Pendlebury Urban District Council); Mr. Raymond Unwin (F.R.S.); Mr. E. T. Gowan (Clerk to the Croydon Rural District Council); and Mr. Henry Vivian, chairman of the Co-partnership Tenants, Ltd. Mr. A. N. C. Shelley, of the Local Government Board, will act as Secretary.

Leicester Municipal School of Art: Appointment Vacant.

An Instructor to teach Architectural Design, History of Architecture, Building Construction, and Furniture Design is wanted for the Leicester Municipal School of Art. Candidates must be either Fellows or Associates of the Royal Institute of British Architects. Practical knowledge of a Building Craft would be a recommendation. The commencing salary is £200 per annum. Applications must be made on printed forms to be obtained from the Secretary, Mr. T. Groves, and be returned to him not later than May 25th.

REVIEWS.

THE IMPROVEMENT OF CALCUTTA.

[*Calcutta Improvement Trust: Report, by request of the Trust, on the Condition, Improvement, and Town Planning of the City of Calcutta and Contiguous Areas. By E. P. Richards, M.I.C.E., etc. Po. Ware, 1914. Printed by Jennings & Bewley, Ware Printing Works, High Street, Ware, Hertfordshire.*]

Mr. Richards has produced a convincing and stimulating report which will in many ways be a model for civic surveys. It consists of some 400 foolscap pages, and is exceedingly well produced and accompanied by complete plans of the city from the sociological, traffic, and other points of view. The heads of the report are given below:—

Section I. General.

The Calcutta Improvement Trust was created by an Act of 1911, based on Part I. of the English Housing Act, 1890—and with powers entirely insufficient to secure the object in view. As the author says:—“Calcutta cannot possibly be town-planned or controlled or be even moderately improved under the existing Improvement Act.” The Act extends over the Municipality, and can be applied, after sanction

by Government, to any specified area in the neighbourhood of Calcutta. It appears that the Board have power to frame *street schemes* or *improvement schemes* to provide for expansion of Calcutta, also *rehousing schemes*, but cannot themselves construct dwellings, shops, etc., unless they are satisfied that no other person is willing and able to do so, under the Board's control.

Mr. Richards advocates a supplementary Act for (a) Powers to exercise the slum repair system; (b) Ordinary continental town planning powers and certain other powers.

Calcutta is one vast plain surrounded by more or less swampy land. The River Hugli, which is from 500 to 1,300 yards wide, although 80 miles from the sea, has a range of tide of nearly 20 feet. The great feature of the present city is the open space known as the Maidan, consisting of 800 acres, surrounding the citadel of Fort William, built by Clive in 1757. Even to-day the densely built-up city is largely limited by the “Circular road” on the lines of the ditch constructed about 1740 as a defence against the Mahrattas. Dalhousie Square, adjoining the original fort site, is still the hub of Calcutta, but, as might be expected, the lines of development



TYPICAL VIEW IN THE BUILT-UP MASS OF CALCUTTA.

Mud and Bamboo Bustee Slum in Foreground, enclosed by streetless better-class property.

have been mainly north and south, parallel with the river bank. Hardly a single radial or diagonal road exists in the whole of Calcutta. One bridge only—the Howrah bridge—spans the river and links up the two main railway stations, one on each side of the river. The suburb of Howrah, on the west side of the river, consists of $2\frac{1}{2}$ miles of factories and nearly 200,000 people, but hardly a decent road. North and north-east of Calcutta are huge blocks of slums, with hardly a street to break up the built-up mass of mud and bamboo huts, and encircled to a large extent by the manufacturing districts of the north and east. A second manufacturing area extends south-westwards along the river bank from the existing rather unsatisfactory docks.

A most interesting sociological map accompanies the report and shows the clear-cut divisions of the city into European, Eurasian, business and native quarters, the best quarters occupied by Europeans being in the neighbourhood of the vast open promenade known as the Maidan. In Calcutta, however, probably more than in any other Indian city, there is much overlapping and intermixing of various races.

Calcutta now contains $1\frac{1}{2}$ million people and, like many another large city, has long outgrown the bounds of its own municipal council, and like London, Paris, Berlin, and Vienna, it consists of a central municipal authority (with nearly 900,000 people), surrounded on all sides by lesser authorities, all of independent status, and with no general ideal as to what is needed to provide for the future of a mighty city.

The Port Trust has charge of the docks and the river bank, but the newly-created Improvement Trust is the only body likely to take a comprehensive view of the whole question.

In the early part of the nineteenth century many improvements were made in the city by an Improvements Committee which drew most of its revenue from lotteries, but this system was abolished in 1836, and for many years the municipal authorities concentrated their attention on such problems as drainage and water supply. Harrison Road, leading from the Howrah Bridge, was completed in 1893, seventy feet wide, and several other smaller improvements have been made. The question of finance, however, has pressed heavily on the municipality, and very little has been attempted in the way of wholesale clearances.

The almost streetless chaos of rabbit warrens forming the Calcutta slum districts is evident from the splendid maps and illustrations accompanying Mr. Richards's report. It is true that there is in a crude form a rough rectangular framework of streets, but very few of these are even 20 feet wide, and the blocks formed by these "streets" are of enormous dimensions, intersected only by alleys of the narrowest and crookedest type. There are 2,500 acres of such slums in Calcutta! In some parts the density of

population is over 700 per acre, and 600,000 people are crammed into built-up Northern Calcutta. The electric tramways belong to a company, but the narrowness and general direction of almost all the existing roads militate against a successful service, and, although there are 31 miles of tramways, at present no tram route crosses the river by the Howrah Bridge.

It is only southwards and south-eastwards that Calcutta can develop freely on suburban lines, and at present there are very few facilities in this direction, the whole of the traffic tending at present to add still further to the congestion of the existing overcrowded areas.

Housing and residential conditions in Calcutta are stated by the Report to be scandalously bad. An acute house famine has prevailed for 30 years and is not yet remedied. Rents are tremendous and accommodation in nearly all cases insufficient. Such conditions must of necessity have their influence on the death-rate, and infantile mortality and tuberculosis are worse than almost anywhere in the world, the death-rate being nearly three times what it is in England.

Even in the European quarters the small bungalows built for single families are now divided into two or more flats, each let at something like £25 a month, although the whole building probably cost only about £700 when built.

Mr. Richards lays down what he considers the main principles:—(a) for the improvement or creation of traffic routes; (b) for the improvement of congested and insanitary areas; (c) for the provision of residential suburbs; (d) a city plan is essential to lay down present and future building lines; (e) legislation. In the author's opinion the English Town Planning Act of 1909 is, in its main provisions, quite inferior to Continental powers, the great main point of the *whole city plan* with all its interests carefully thought out and considered being but partially dealt with. Here, undoubtedly, there is much truth in the criticism, and the Town Planning Act will ere long need reconsideration to enable cities to be considered *as a whole* and not as partial patches of so-called "building land."

Most interesting comparisons are given of the town planning work which is being done all over the world, both in Europe and America, but the main value of the Report lies in its special application to a problem unique in town planning—the problem which Calcutta itself has to face. It is startling to find that the cost of buying up Calcutta property for improvements may be put at as much as two-thirds of European cost, although the rateable value per head is less than one-fourth what it would be in England. Calcutta, although for so many years a capital city, does not appear to have received much State aid, and the problem before the Improvement Trust is therefore a most difficult one.

The comparative tables given in the Report of

road widths, open spaces, tramway mileage, port traffic, are excellent.

Section II. City Main Roads.

From the outset it must be understood that all new roads, widenings, and creative work are to be regarded only as the primary lines of a complete urban, suburban, and extra suburban city plan of Calcutta. The average city is occupied almost wholly with suburban planning, but Calcutta's greatest problems are internal.

In considering the traffic problem, the slowness and awkwardness of the native two-wheeled bullock cart, usually drawn by a pair of bullocks, has to be considered, and especially the amount of street space, both in length and width, monopolised by such a vehicle. The number of motor vehicles in the city is at present extremely limited, but this will no doubt tend to increase with improved facilities. Pedestrian traffic is however very heavy, and the tramway system is quite inadequate to cope with the large number of people who wish to travel. Mr. Richards gives special attention to the traffic problem, and his studies as to the general directions and tendencies of the various classes of traffic are painstaking in their thoroughness. The provision of a fair number of diagonal streets appears to be an urgent necessity. New and parallel roads are recommended rather than widening existing roads. The sound policy is emphatically, widen only where unavoidable, divert into new routes or duplicate old routes wherever possible. The suggested policy of providing "arcades" along each side of the street would undoubtedly add very considerably to the effective width, and such arcading seems peculiarly suitable to Eastern conditions.

Section III. Schemes and Estimates.

In the section dealing with schemes and estimates, a most valuable plan is given showing comparative values by different colours. The author, however, does well to emphasise the point that no real improvement can be obtained except with the whole-hearted co-operation with the Improvement Trust of the various authorities, such as the Corporation, the Port Trust, the railway companies, the tramway company, the great merchants, the Chamber of Commerce, and lastly the Press, and thereby the public. The method of thought in arriving at the scheme recommended is shown step by step by a series of plans starting with the "ideal," then the "sub-ideal," and finally, by a process of eliminating all except necessary improvements, and by cutting down road widths to an absolute minimum, we arrive at what the author considers the most practical and practicable scheme. In the process, however, as he himself admits, it loses some, at any rate, of the "ideal" with which it started.

The ideal is set out as 22 miles of new streets and the widening of 13½ miles, to cost 8½ millions sterling in

all, and this is ultimately whittled down to something like 12½ miles of new streets and 8 miles of street widenings to cost 3½ millions sterling, to be done partly by the Improvement Trust and partly by the Calcutta Corporation. The whole of the schemes, however, bear evidence of the painstaking care with which the details have been prepared. The main criticism to which the completed scheme can be subjected is that it focusses all main roads towards the centre of the city, and consequently crowds the traffic towards the one existing bridge. In a few years, however, there may be several bridges spanning the Hugli, and some form of decentralisation may then be necessary.

Section IV. Calcutta Slums.

Section IV. is probably the most interesting part of the report. The conditions and origin of the Calcutta slum areas are dealt with, and it is proved conclusively that no satisfactory remedy is to be obtained from the existing Act by buying up and demolishing condemned areas. The remedy sug-



CALCUTTA: View through gully-passage between comparatively new chawls in Harrison Road. Taken at noon on bright day. Shops line each side of ground floor: numerous living-rooms face into this crovasse. Light angle 85°.

gested is the system known as the "slum repair" system, something on the lines already adopted in Birmingham.

Some appalling figures are given from a medical survey made in 1911, from which it appears that out of 14,332 houses examined, only 18 per cent. were found to be sanitary, even when judged by the exceedingly low Calcutta standard.

Much of Northern Calcutta contains only from 9 per cent. to 12 per cent. of total open space, a truly terrible figure when it is borne in mind that these slums are generally twice the height of similar English slums, which are in many cases only two stories in height. The average for Calcutta is about 20 persons per house.

The *total open space* area in the worst Calcutta slums of 10 to 20 acres in one patch is *only about 5 per cent.*, and the rectangular framework of streets is so far apart that the average size of each block is something like 100 acres, the smallest being about 20 acres and the largest about 270 acres, served only by tortuous lanes and narrow passages. Roughly from 400 to 650 yards separates each cross street.

Until recent years Calcutta has had hardly any bye-laws worthy of the name, and something like one quarter of the whole population is still living in houses that in England would be condemned as "unfit for habitation." This state of affairs appears to call for urgent and immediate action. The powers of the Calcutta Improvement Trust under their special Act of 1911 to acquire unhealthy areas seem to contemplate wholesale demolitions, and if funds were unlimited this would undoubtedly be the best course to pursue. With such huge areas to be dealt with, however, Mr. Richards is of opinion that the financial difficulties would be such as to render this course impossible. The total expenditure at present contemplated by the Trust is about £6,000,000, and to deal with only a portion of the worst slums by demolition would involve an expenditure of at least this amount. Slum sites in Calcutta would cost something like £18,000 per acre for land alone. The rehousing, too, on any paying basis, would involve the construction of huge barrack-like tenements (chawls), thus perpetuating the existing evil and overcrowded conditions. The present day "chawls" in Calcutta are mainly of four sides, built round an internal court, which forms a mere stagnant air well.

The "slum repair and improvement" system can be carried out largely by the owners, without very great expense, and a special inspection staff is suggested to deal systematically with the slums over a period of 12 years, at the same time improving the amount and extent of open spaces surrounding the buildings by as far as possible im-

proving existing building regulations, especially as to angles of light. In the main, however, the author is firmly convinced of the necessity of any direct housing being as far as possible in the form of small single-family houses erected in the outskirts where land is cheap, especially having in view the extreme poverty of 75 per cent. of the people. A large number of one-storey houses of this type have already been built at Madras.

The greater portion of the report is unavoidably taken up with internal improvements in the city, but the author does well to point out that the growth outwards can be, and must be, subject to a proper plan. The present powers of the Calcutta Improvement Trustees, however, do not extend to town planning in the broad sense. If they choose to purchase land and themselves carry out any particular improvement they can do so, but at present they have not power to lay down anything in the way of a comprehensive plan. No real success can be expected or achieved in city expansion until it is realised that the first essential is a carefully prepared town plan. In the absence of such a plan, with compulsory powers for its enforcement, it is a financial impossibility for an authority to itself execute even a fraction



CALCUTTA: COTTON STREET, LOOKING SOUTH.

of the works that will be necessary within a very few years.

Section V. Town Planning Legislation.

Mr. Richards's book contains an admirable summary of the town planning legislation already achieved in various European countries, and he points out that such powers are welcomed by owners quite as much as by local authorities. The Italian "Law of Expropriation for the Purpose of Public Benefit" (1865) gives authority to towns and cities of over 10,000 inhabitants to prepare "Building Regulation Plans" and "Extension Regulation Plans." The proposal for an extension plan having been declared a work of "public benefit," a plan is prepared and approved and the authority have then power to acquire any land required for streets, etc., at a summary valuation. Betterment can also be charged to the extent of one-half the actual increase in value. The regulatory plan for control of buildings, etc., must be published by the mayor, but when adopted and approved by the Corporation (or, if necessary, the Provincial Legislative Assembly), and finally by the Superior Council of Public Works, the plan has all the force of law and all new buildings have to conform thereto. The plan is sanctioned for 25 years ahead, and no compensation is entailed under this head. Interesting details are given of the success of this method at Milan and Turin. In German town planning legislation an excellent translation is given of the well-known "Lex Adickes," of Frankfurt-on-the-Main (1902), which enables the authority to take land as required, construct the necessary roads, and subsequently re-distribute the remaining 60 per cent. to 65 per cent. land among the owners. The Swedish Town Planning Act (1874) and the English Town Planning Act (1909) are also summarised. The United States has little help in regard to general town planning, but, as Mr. Raymond Unwin has pointed out, the "special assessment" for the purpose of parks and open spaces which is in force in such cities as Denver and Kansas City has achieved enormous success.

It will be seen that this Report on the Improvement of Calcutta is not limited to the narrow point of view; it ranges over the whole field of town improvement and legislation. It touches on the land problem, the taxation of site values, and concludes with a most valuable series of suggestions for a supplementary Act for Calcutta's own particular needs, and for the groundwork of the future city plan. Parks and parkways, placed if possible in general radiating directions, are undoubtedly desirable, and public opinion is coming more and more to this ideal. Last but not least we have the work of the artist and the architect to crown and surmount the beauty of the city.

W. R. DAVIDGE [A.]



9 CONDUIT STREET, LONDON, W., 9th May 1914

CHRONICLE.

The Annual Elections: New Nominations.

The following nominations have been made by members in accordance with By-law 33:—

As Members of Council.

ADSHED: PROFESSOR STANLEY DAVENPORT, M.A. [F.]

Nominated by A. E. Richardson, E. A. Rickards, H. V. Lanchester, Herbert W. Wills, *Fellows*; Basil Oliver, C. Lovett Gill, Stanley C. Ramsey, *Associates*.

AMBLER: LOUIS [F.]

Nominated by E. Guy Dawber, Wm. Woodward, Gerald C. Horsley, Ernest Newton, George Hubbard, H. D. Searles-Wood, *Fellows*; Chas. H. E. Bridgen, *Associate*.

FLETCHER: BANISTER FLIGHT [F.]

Nominated by Andrew N. Prentice, H. Phillips Fletcher, H. D. Searles-Wood, Sir A. Brunwell Thomas, Howard Chatfield Clarke, Wm. Woodward, Gerald C. Horsley, *Fellows*.

GARBUTT: MATT. [F.]

Nominated by Edward Greenop, Fred. W. Marks, Sydney Perks, William Pywell, E. J. Gosling, F. T. W. Goldsmith, *Fellows*; Herbert Shepherd, *Associate*.

JEMMETT: ARTHUR RUTHERFORD [F.]

Nominated by Percy B. Tubbs, Alfred W. S. Cross, H. V. Lanchester, E. A. Rickards, *Fellows*; Charles Davis, Charles H. Gage, L. Sylvester Sullivan, *Associates*.

REDFERN: HARRY [F.]

Nominated by F. W. Troup, W. E. Vernon Crompton, H. V. Lanchester, E. A. Rickards, E. Guy Dawber, George Hubbard, *Fellows*; Noel W. Hadwen, *Associate*.

RICHARDSON: ALBERT EDWARD [F.]

Nominated by Herbert W. Wills, S. D. Adshead, E. A. Rickards, H. V. Lanchester, *Fellows*; Stanley C. Ramsey, W. Dathy Quirke, C. Lovett Gill, *Associates*.

SCOTT: WILLIAM GILLBERG [F.]

Nominated by Percy B. Tubbs, A. R. Jemmett, Frank E. Smees, Matt. Garbutt, *Fellows*; L. H. Bucknell, Wilfred Hoyle, Percival J. Haywood, *Associates*.

SUTTON: ERNEST RICHARD ECKETT [F.]

Nominated by Albert N. Bromley, A. Ernest Heazell, Robert Evans, T. H. Thorpe, Arthur H. Hind, Adam F. Watson, *Fellows*; H. G. Watkins, H. Alderman Dickman, John Woolfart, *Associates*.

WILLS: HERBERT WINKLER [F.]

Nominated by Sir Aston Webb, W. E. Riley, Alfred W. S. Cross, H. V. Lanchester, Edwin Cooper, D. Barclay Niven, *Fellows*; Herbert Shepherd, *Associate*.

As Associate-Member of Council.

GUTHRIE: LEONARD ROME [A.]

Nominated by E. A. Rickards, H. V. Lanchester, A. R.

Jemmett, S. D. Aulsehead, *Fellows*: Stanley C. Ramsey, S. Douglas Topley, Paget L. Baxter, *Associates*.

As Members of Practice Standing Committee.

HUDSON: JOHN [F.].

Nominated by George Hubbard, Matt. Garbutt, Wm. Woodward, Herbert A. Satchell, Edward Greenop, *Fellows*: Percival M. Fraser, J. Douglas Scott, *Associates*.

CROSS: ALFRED WILLIAM STEPHENS, M.A. [F.].

Nominated by George Hubbard, Matt. Garbutt, Wm. Woodward, Herbert A. Satchell, Edward Greenop, *Fellows*: Percival M. Fraser, J. Douglas Scott, *Associates*.

Exhibition of British Architecture in Paris, May 1914: Arrangements for Special Visit.

Subjoined is the programme of the visit which is being arranged in connection with the forthcoming Exhibition of British Architecture in Paris, in conjunction with the Société des Architectes Diplômés. It is hoped that a large number of members of the Institute and the Architectural Association will avail themselves of the facilities offered.

Friday, 15th May.

10 a.m.—Leave Charing Cross, arriving at Paris 5.30 p.m.

8.30 p.m.—Banquet with the Société des Architectes Diplômés, at which the Under Secretary of State for Fine Arts will preside.

Saturday, 16th May.

10 a.m.—Opening of the Exhibition of British Architecture at La Salle du Jeu de Paume, Place de la Concorde, by Monsieur Poincaré, President of the French Republic.

Afternoon.—Visit to Salon.

Sunday, 17th May.—Visit to Versailles.

Monday, 18th May.—Visit to Fontainebleau.

Tickets for the banquet on Friday evening, price 13 frs., may be booked by making application to Mr. F. R. Yerbury, Secretary of the Architectural Association, at 18, Tufton Street.

More complete details of the arrangements in Paris will be issued to those attending the visit. Arrangements have been made with Messrs. Thos. Cook & Sons for special terms for rail and hotel accommodation, and those deciding to join the party should communicate at once with Messrs. Cook in order that the necessary accommodation may be reserved. Ladies are invited to join the party.

The itinerary is as follows:—

Friday, 15th May, leave London (Charing Cross Station) at 10 a.m. via Folkestone and Boulogne. Arrive Paris (Nord Station) at 5.20 p.m.

Saturday, 16th May, in Paris.

Sunday, 17th May, in Paris.

Monday, 18th May, leave Paris (Nord Station) at 9.20 p.m., via Calais and Dover.

Tuesday, 19th May, arrive London (Charing Cross Station) at 5.43 a.m.

The fare, £4 7s. 6d. each passenger, provides:—

1. Travel tickets from London to Paris and back, Second Class rail and First Class on steamers (valid for 15 days). Supplement for First Class travel ticket throughout, 15s. 5d.
2. Hotel accommodation, consisting of meat breakfast,

table d'hôte dinner, bedroom, lights and service, from bed on Friday 15th May until dinner on Monday 18th May.

3. Transfer of passengers and baggage between station and hotel on arrival and departure at Paris.

4. Fees in connection with seat reservations on trains.

5. All fees to hotel and railway servants and to the drivers of the conveyances utilised.

6. The services of a competent courier, who will travel with the party throughout, generally supervising the arrangements and acting as interpreter whenever necessary. Hand baggage will be conveyed free.

The fare of £4 7s. 6d. provides for accommodation at the Hotel du Louvre, Hotel St. Petersburg, or similar establishments. Members can be accommodated at other hotels at the following fares:—Hotel St. Anne, £4 15s.; Hotel Lille and D'Albion, £5 5s.; Grand Hotel or Hotel Continental, £5 15s.; Hôtel Edward VII., £7 2s. 6d.

The special attention of members in the provinces is drawn to the arrangements with Messrs. Cook to issue tickets to London at reduced fares.

Memorial to M. Choisy.

A tablet to the memory of the late M. Auguste Choisy has been set up at the Hôtel de Ville of his native town, Vitry-le-François, the cost having been subscribed by the Société Centrale des Architectes Français, the R.I.B.A., the Ecole Nationale des Ponts et Chaussées, and some architect friends. The tablet is on the wall of the gallery in the inner court, by the entrance to the library, to which M. Choisy bequeathed his valuable collection of books and engravings. It is inscribed:—

A LA MÉMOIRE
D'AUGUSTE CHOISY
NÉ A VITRY-LE-FRANÇOIS
INSPECTEUR-GÉNÉRAL DES PONTS ET CHAUSSEES
1841-1909
AUTEUR DE NOMBREUX OUVRAGES TRÈS ESTIMÉS
L'ART DE BÂTIR CHEZ LES ROMAINS
CHEZ LES BYZANTINS
ET CHEZ LES ÉGYPTIENS
L'HISTOIRE DE L'ARCHITECTURE
L'ARCHITECTURE DE VITRUVÉ
ETC.
MÉDAILLE D'OR
DE L'INSTITUT ROYAL
DES ARCHITECTES BRITANNIQUES 1904
HOMMAGE DE SES COMPATRIOTES
DE SES AMIS
ET DE SES ADMIRATEURS

The late Duke of Argyll.

At the General Meeting of the Institute last Monday, Mr. H. V. Lanchester, *Vice-President*, referring to the death of the Duke of Argyll, said: "I think it would not be fitting that this meeting should pass without reference to the sad bereavement which has befallen H.R.H. the Princess Louise Duchess of Argyll. The Duke, it will be remembered, filled the position of Vice-President of the International Congress of Architects, held under the auspices of the

Institute in 1906. He also presided at the Opening Meeting of the Congress and delivered the Inaugural Address at the Guildhall. The proceedings on this occasion were graciously honoured by the presence of Her Royal Highness the Princess Louise, whose interest in our art and in the sister art of sculpture is well known. I beg to move that a respectful message of sympathy and condolence with Her Royal Highness in the lamented death of her husband be forwarded to the Princess in the name of the President, Council, and General Body of the Royal Institute of British Architects." The members signified their unanimous assent by rising from their seats and passing the vote in silence.

OBITUARY.

The late M. Emile Vaudremer [*Hon. Corr. M.*].

The death of M. Vaudremer, one of the oldest of our Foreign Corresponding Members, which occurred on the 5th February last, has already been noted in the JOURNAL [28th March 1914], but a few details of his long and distinguished career, partly culled from M. Jacques-Hermant's sympathetic Memoir in *L'Architecture* of the 28th February, may not be without interest to members.

Emile Vaudremer was born in Paris in 1829, and was a pupil of Blouet and Gilbert, whose atelier he entered in 1847, passing into the first class in 1850. In the same atelier at this time were Diet (Grand Prix 1853) and Daumet (Grand Prix 1855). He was twice "logiste," and carried off the Grand Prix in 1854. The subject of his "envoi" from Rome in his fourth year consisted of the Mausoleum of Hadrian, and his drawings of this monument, exhibiting the various successive transformations and the archæology of the structure, now known as the Castle of St. Angelo, evince the most minute researches. On his return to Paris in 1858 he entered the office of M. Duban, who was at that time engaged on the buildings of the Ecole des Beaux-Arts. In 1868 he was appointed sectional architect of the thirteenth and fourteenth arrondissements, his first important work being the Prison of La Santé, for which he received the Medal of the Salon. Two years later, at an age when many Grand Prix men are fresh returned from Rome, he built what is generally recognised as his *chef-d'œuvre*, the Church of Saint-Pierre of Montrouge. This was the first church in Paris based on the study of Byzantine art, to which Vaudremer had devoted himself with intense ardour at Ravenna, San Miniato, Monreale, and Palermo. This remarkable building is well illustrated by a series of seven plates in the *Revue Générale de l'Architecture*, Vol. XXXIX. (Vol. IX., 4th series), Plates 12-18. The church of Saint-Pierre of Montrouge was completed shortly after the War, and, faithful to his first predilections, his last work, the charming but little-known Greek church in the Rue Bizet (illustrated in *L'Architecture*, 28th February 1914), shows the same restraint and refinement which

characterised his first church. M. Vaudremer was one of the first architects to employ iron largely in his constructions, following in this respect the example of his chief, Victor Baltard, Director of the Service de la Ville de Paris, who used iron extensively in his church of Saint-Augustin. Immediately after the War his design was selected in competition for the monument of Champigny, one of the first to be erected on the battlefields of the defence of Paris, and he obtained fourth prize in the competition for the new Hôtel de Ville, Paris. In 1873 he was appointed architect of the diocese of Beauvais, one of his first works being the Episcopal Palace in that city. In 1876, when the Service of the City of Paris was reorganised, he was appointed architect-in-chief of religious buildings, and as such was responsible for the erection of the very fine church of Notre-Dame of Auteuil, the Protestant church of Belleville, and the restoration of the South front of Saint-Germain-l'Auxerrois. In 1879 he was elected member of the Académie des Beaux-Arts in the room of Louis Duc deceased, and also, on the nomination of the Minister of Public Instruction, succeeded Duc as architect on the Commission of School Buildings. His school buildings at Beauvais, Vaugirard, Grenoble, Montauban, Passy, and elsewhere have often served as models for buildings of this class in various parts of the country. M. Vaudremer sat for a time on the Conseil Général des Bâtiments Civils, and was a member of the Jury of Admission and of Awards at the Universal Exhibition in Paris, 1878. The rare distinction of his work received the repeated and signal recognition of the Government. As early as 1867 he was created Chevalier of the Legion of Honour, in 1882 he was promoted Officier, and in 1900 received the rank of Commandeur.

The late F. P. Cockerell, while on his travels, met Vaudremer in Rome in 1855, and the acquaintance then formed ripened into a fast and lifelong friendship. It was on Cockerell's nomination that Vaudremer became a Corresponding Member of the Institute.

R. PHENÉ SPIERS, F.S.A. [F.].

MINUTES. XIII.

SPECIAL GENERAL MEETING (REGISTRATION).

At a Special General Meeting, convened by the Council under By-law 65, and held Monday, 27th April 1914, at 8 p.m.—Present: Mr. Reginald Blomfield, R.A., *President*, in the Chair; 46 Fellows (including 17 members of the Council), and 67 Associates (including 3 members of the Council):

The President announced the object of the Meeting—viz., to consider the proposals of the Council for a new Charter and By-laws, in order to give effect to the Resolution passed at the Special General Meeting of the 5th January last, that a Register of persons qualified to practise as Architects be constituted and maintained by the Royal Institute of British Architects.

The President having formally presented the draft proposals, copies of which had been previously issued to members, stated that the document would be dealt with clause by clause, and that Mr. C. Stanley Peach [F.] would move their adoption and answer any questions upon them.

In reply to Mr. K. Gammell [A.] the President stated that

the Council had been legally advised that Associates were entitled to vote upon the various proposals.

An amendment by Mr. W. R. Davidge [A.], seconded by Mr. A. W. S. Cross [F.], to insert in Clause 1 the words "either alone or in conjunction with other bodies" after the initials "R.I.B.A.," was withdrawn, on the understanding that the suggestion would receive the Council's careful consideration.

To meet an objection by Mr. Herbert Shepherd [A.] it was agreed to insert the word "hereafter" after the word "Council" in the concluding paragraph of Clause 1. The Clause was then agreed to.

Clause 2 was agreed to.

In Clause 3 (b) it was agreed to delete the word "the" before "Allied Societies," and to insert the words "the Councils of" after "recommended by," and in the concluding paragraph "six months" was substituted for "three months." Subject to these amendments Clause 3 was agreed to.

Clauses 4, 5, and 6 were agreed to.

An amendment to Clause 7, moved by Mr. S. Douglas Topley [A.] and seconded by Mr. Horace Cubitt [A.], "That the Register be controlled by a Registration Board composed of 21 architects elected periodically by and from those whose names appear on the Register, not less than 11 being corporate members of the R.I.B.A.," was negatived by 65 votes to 22.

A proposal by Mr. Davidge to substitute for "Standing Committee" in Clause 7 the words "Registration Board" or "Registration Authority" was agreed to, and Clause 7 as amended was then carried.

Mr. Stanley Peach, with the view of some latitude being given to the Council to extend the representation of Licentiates beyond what was given in Clause 8, moved the omission from that clause of the words "for the specific purposes only," and also the omission of the sentence "In all other regards the constitutional position of the Licentiates to remain as at present."

Mr. Edward P. Warren, F.S.A. [F.], having seconded the proposal, Mr. Ernest Newton, A.R.A. [F.], moved the adjournment of the debate.

Mr. George Hubbard, F.S.A. [F.], seconded, and the motion being put from the Chair was carried by 41 votes against 38.

The proceedings then closed and the Meeting rose at 10.15.

ANNUAL GENERAL MEETING.

At the Eightieth Annual General Meeting (being the Thirteenth General Meeting of the Session 1913-14) held Monday, 4th May 1914, at 8 p.m.—Present: Mr. George Hubbard, F.S.A., *Vice-President*, in the Chair; 21 Fellows (including 7 members of the Council), 23 Associates (including 2 members of the Council), and Mr. Harold E. Saffery, the professional Auditor of the Institute accounts, the Minutes of the Meeting held Monday, 20th April, having been published in the *JOURNAL* were taken as read and signed as correct.

Mr. H. V. Lanchester, *Vice-President*, acting for the Hon. Secretary who was absent, having referred to the death of the Duke of Argyll, who had acted as *Vice-President* of the International Congress of Architects held under the auspices of the Royal Institute in 1906 and presided at the Opening Meeting and delivered the inaugural address at the Guildhall, it was

RESOLVED, That a respectful message of sympathy and condolence with Her Royal Highness the Princess Louise in the lamented death of her husband the Duke of Argyll be forwarded to the Princess in the name of the President, Council, and General Body of the Members and Licentiates of the Royal Institute of British Architects.

The decease was also announced of Sir Edwin Durning-Lawrence, *Hon. Associate*, elected 1887, and Alfred Aitchison, *Associate*, elected 1880, and on the motion of the Chairman a vote of condolence was passed to the relatives of the late members.

The following Associates attending for the first time since their election were formally admitted by the Chairman—viz., Theodore Nelson Newham, Richard Howard Gutteridge, Stanley Howe Fisher, and Stanley Salisbury.

The Chairman formally presented the Annual Report of the Council for the official year 1913-14, and moved its adoption clause by clause.

On the motion of Mr. Herbert Shepherd [A.] the Chairman agreed on behalf of the Council that a note should be inserted in the Report recording the death of the late Chief Clerk, Mr. Charles Tanner, who had been for twenty-seven years in the service of the Institute.

Mr. Wm. Woodward [F.], Chairman of the Finance and House Committee, briefly reviewed the Report, and made detailed reference to the financial affairs of the Institute.

With regard to the grant to the Architects' Benevolent Society, it was agreed that the Chairman should lay before the Council the general opinion of the Meeting that a larger grant should be made to the Society, and that a note should be attached to the Report calling attention to the deserving objects of the Society and urging members to subscribe.

On the motion of Mr. Matt. Garbutt [F.], who pointed out that the Report contained no particulars of the work of the Committee on the Payment of Examiners, it was agreed to insert the words "some of" in the opening paragraph so as to read "Particulars of the work of some of these Boards and Committees are embodied in the Report."

Subject to the above, the various clauses in the Council's Report were adopted.

The Report of the Art Standing Committee was adopted.

Arising out of the Report of the Literature Standing Committee, questions relating to the *JOURNAL*, the *CALENDAR*, and the Records Committee, were raised respectively by Messrs. E. B. Woodcock [A.], Percival M. Fraser [A.], and Herbert Shepherd [A.], and answered by the Chairman, Mr. Wm. Woodward, and the Secretary.

The Report of the Literature Committee was adopted.

Mr. Wm. Woodward, Chairman of the Practice Standing Committee, moved the adoption of the Report of his Committee and requested that a note be added, stating that since the Report was printed the District Surveyors' Association had adopted the Committee's suggestions with regard to the Form published by them, and that all existing Forms had been altered in accordance therewith.

The Report of the Practice Committee was agreed to.

Mr. Frederic R. Farrow [F.], Chairman of the Science Standing Committee, having moved the adoption of the Report of that Committee and answered questions put by Messrs. Percival M. Fraser, Matt. Garbutt, and Herbert Shepherd, respecting the paragraphs in the Report headed English Forestry, Timber Specification, and Defective Roofing Tiles, the Report of the Science Committee was agreed to.

Mr. H. V. Lanchester [F.], Chairman of the Town Planning Committee, made a brief reference to the work of that Committee, and their Report was agreed to.

Mr. Harold E. Saffery answered questions raised by members relating to the Finances.

With regard to the Estimate for the current year, the Secretary, in reply to Mr. Farrow, explained that the difference between the Examination income and expenditure did not represent profit; that the sum put down for expenses represented only a small part of the cost, as salaries, establishment charges, and other expenses were not included; and that the Examinations were conducted at a loss.

Mr. Maurice B. Adams [F.] having suggested that a note embodying the explanation given by the Secretary should be added to the Report for the information of members, the Chairman stated that the point would be considered before the Report was issued.

The Report on the Finances, together with the Report of the Auditors, was then agreed to.

On the motion of Mr. G. Leonard Elkington [A.] the Meeting accorded a hearty vote of thanks to Mr. John Hudson [F.] and Mr. W. H. Burt [A.] for their services as Auditors, and Mr. R. Stephen Ayling [F.] and Mr. H. A. Saul [A.] were nominated as Auditors for the ensuing Session.

The proceedings then closed and the Meeting separated at 10.10 p.m.



Victoria Embankment

BEAUTIFUL LONDON.

By T. RAFFLES DAVISON [*Hon. A.*].

Read before the Royal Institute of British Architects, Monday, 18th May 1914.

LONDON is beautiful. Its fine river, its trees, its parks and squares, its vistas, its teeming life, and its wonderful atmosphere fill it with pictures of never-ceasing, of ever-changing, charm. But London is also sordid, depressing, ugly, and smoke-laden. An American writer has said of London: "It conveys an impression of sordid or ridiculous architecture, of tawdry shops, and of the lack particularly of everything spacious, gay, or monumental." It is full of contrasts, violent, appalling, and picturesque. These contrasts appeal to us all, and I suppose we should none of us feel the same interest in it if perfection reigned. People plead hard for its mud banks. Still, we make beauty our aim, and in the term beauty we include everything which goes to the general amenity and well-being of the city. This inclusive aim is the objective of the London Society.

THE LONDON SOCIETY.

If the approval and support of many notable people were enough to justify its existence to the world, the London Society might feel very well content with itself. But though the object of its existence—the good of London—is beyond reproach, the methods by which it seeks to attain that end cannot hope to escape criticism, and perhaps even opposition, from many who approve its object. And not only is that opposition to be expected from many who have the misfortune to be ignorant on the subject of architecture, but the very elect amongst the architectural profession may possibly think that the ideals which the governing Councils of the London Society set up from time to time are misjudged, or worse. The imaginative dreamer or critic who conjures up visions of great fleets of commerce by the mere act of looking upon the mud banks which now line the shore of the Thames is not a likely person to look with favour on the clean and massive walls of granite which form the boundary of a great river boulevard in the ideal vision of a London Society Committee.

Though I venture to hope it is a foregone conclusion that the aims of the London Society will have the sympathy and support of the Royal Institute of British Architects, it may be seasonable to suggest that the Society will welcome something more from that body than a mere platonic regard. The Society will do much to relieve the burden of responsibility which the Institute must feel as to the future of art in general and architecture in particular, and it will be its especial business to do things which may, perhaps wisely, be considered outside the province of the R.I.B.A.

THE AIMS.

It is, of course, needless to make out a case for the necessity of creating and maintaining and constantly developing London as a great and beautiful city, but as to how it is to be done is

a matter of very great moment indeed. There are four dominant considerations which affect the result: (1) The Control; (2) The Cost; (3) The Incentives; (4) The Methods.

Now here are points to consider, and we will, if you please, leave out the two first and come to the last, for the London Society does not aim either to exercise the control or to find the money. It does, however, aim to do something very definite about the third and fourth of these points. It would, I presume, like to make and keep everybody very uncomfortable about the future of London until it has a very much brighter outlook than at present. It would try to keep us from a sleepy satisfaction with all the good things we at present possess, and to fill us with a divine discontent till the outlook is better. You will perhaps agree that this question of incentive is of the first importance, that without it nothing will be done, and that to provide it is an aim worthy of a great Association.

Every new society has to give some account of its aims and show some justification for its existence. But if it were objected that there are already so many societies existing for the amelioration of London, one might reply that it is just the existence of so many bodies and varied governing agencies which gives one of the most powerful reasons for the existence of the London Society. This Society hopes to include in its ranks so many of those whose position and capacity enable them to benefit London that it may consist of the very *élite* of our citizens, and that consequently its authority and opinion may not be safely disregarded. The aim is to create a body of public opinion so catholic in its outlook, and so well judged in its action, that London may be guided by the best of all good counsels. Besides this, it is hoped to stimulate the desires and ambitions of the whole body of London citizens for the most perfect development of the city.

There is an endless list of subjects which should interest the citizens of London. Might we not have some seats along the Mall and other thoroughfares? Might we not have the park railings set further back, with flowers between the park and the road, and palisades less like the boundary to a lunatic asylum? Might we not have covered footways and bridges? Might we not have a thorough reconsideration of roadway crossings and reduced roadway facilities for street racing? Might we not banish manufactures which produce noxious smells entirely to the outskirts? Might we not limit the abuse of advertisements? Might we not proportion the heights of our buildings to the width of our streets? etc., etc. Anyone who has personally compared the delights of grass and flowers in the streets of Continental cities like Munich or Vienna is inclined to wonder why London cannot have them too. Those who have rested under the shade of trees in Berlin venture to think they might find the same privilege in London. Even in Western Canada they have got thus far, and one sees notices saying: "This park is your property—take care of it."

The chief issue which is set before the London Society is the good of London as a city, its orderly and beautiful development, its general amenity as a place for business or pleasure. The best means by which this is to be attained will, it is thought, be in a cultivation of the general interest of the public in the subject, and this is one of the chief objects of the London Society.

It is impossible to avoid the conclusion that under the existing conditions the development of London cannot be worthily secured. There are two main factors which offer insuperable difficulties. First the conditions of government and management which now exist; second, the lack of adequate ideals towards which the whole future development of London should be directed.

These ends can only be attained by a full and real combination of the best thought and effort amongst every class of the community. The last thing desired is to make it a society of architects, engineers, surveyors, or of any one preponderating class. The worst that could befall it would be that it should become political or factious in any sense. The ideal member of such a society would perhaps find a suitable political creed in that of a very rabid Radical Conservative.

METHODS.

We are under no illusion as to the small limits within which we can work. You cannot make people good by Act of Parliament, and you cannot make a city beautiful and full of fine

architecture merely by controlling legislation. It needs something more than that. At present our architecture represents very fairly the times and the people. The demand for anything very good is not superabundant, and probably would not increase to any large extent just because there were many better opportunities for its display.

COHERENT ACTION.

The initial difficulty at present as to London is the lack of unity and coherence in its many-sided governments and control. It seems doubtful when and how this will be overcome. On the face of it there seems a clear absurdity that London should be made up of twenty-eight boroughs, with their separate methods of administration and rates, even though they may be so dissimilar in their amenities and population as Westminster and Highgate.

It would appear that there should be some simplifying process which might result in the creation of one organic whole with a unity of rates and interests. It may not be, at first sight, clear to the working-man who trudges along the Mile End Road that he shares a community of interest in London with the dainty rich who lounge along our West End streets; but it could, I suppose, be proved that they both profit by a dignified, beautiful, and spacious city, by fine parks and handsome houses, as well as by cheerful, healthful, and well-designed homes and surroundings for the poorer people. And in the East End the people are paying higher rates. One can hardly doubt that some day the wider view and the statesmanlike policy will bring about a better union of forces and a more equitable distribution of burdens.

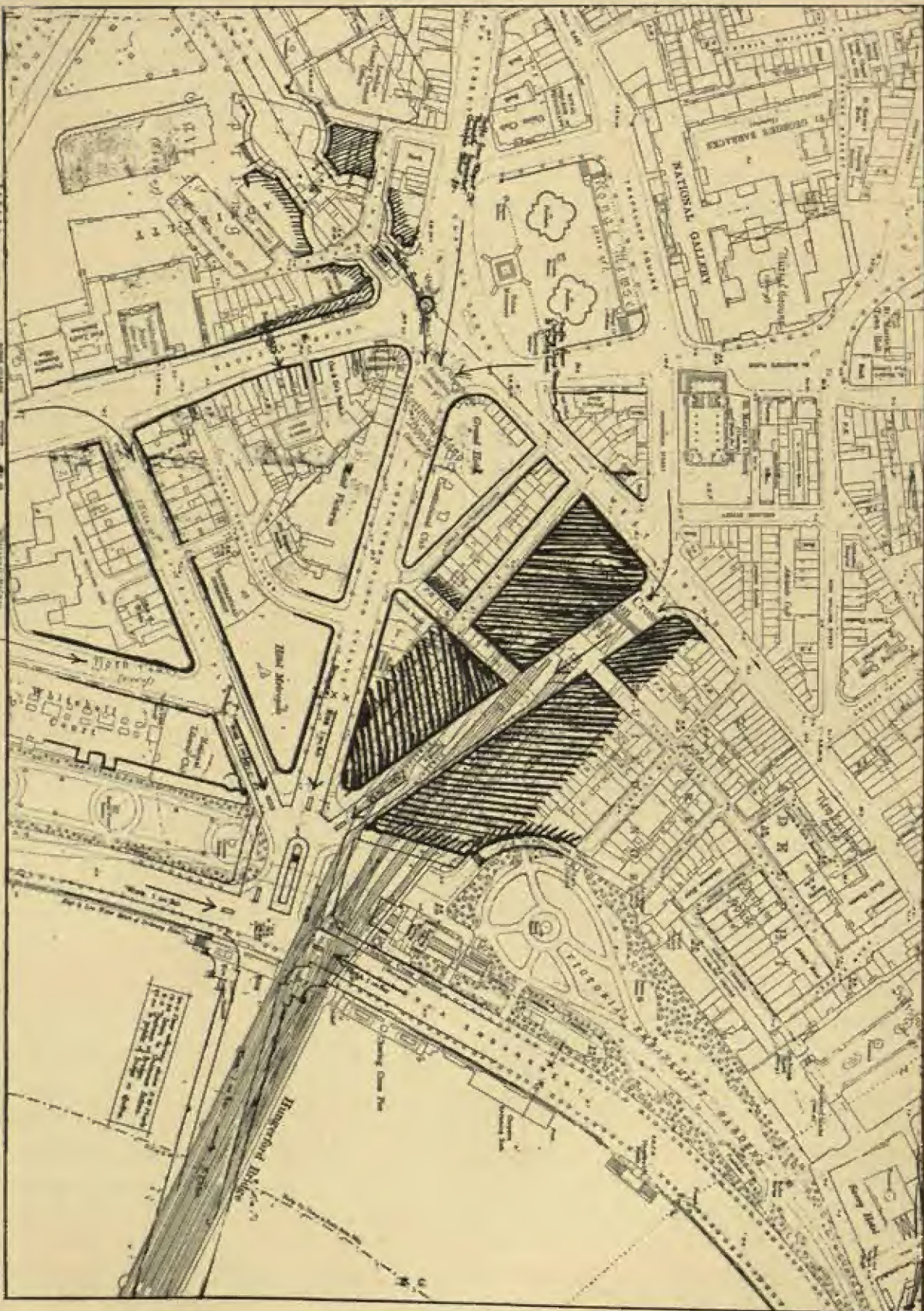
CONTROL.

The more one considers the many subjects in detail which affect the general amenity of London, the more one realises that a supreme authoritative control is of vital importance. Amongst the many debatable points to be considered is the attitude of the Government to the capital city of the Empire. We have heard it argued that London is rich enough to carry its own burdens. This some of us cannot subscribe to. We think that such a city as London ought to receive very substantial contributions from the Imperial Exchequer to do things which the overburdened ratepayer ought not to be taxed with. The value of Government interest can surely be partly gauged from the large values which accrue to great business concerns by the possession of fine buildings. The grandeur and dignity of a capital city is surely an asset of value to the Empire, and perhaps this might be conceded whether the Empire be looked upon as a big trading concern or as a centre of civilisation and progress for the whole world. One of the permanent factors in the good government of London would appear to be that every citizen should be made to share in its burdens and responsibilities in fair and equal proportion, such as the unification of rates would tend to bring about. Every citizen of London should take some sort of pride and interest in its well-being and should bear his fair share in promoting it.

BETTERMENT.

The application of the betterment principle is supposed to apply in a strictly limited way, but the effects of betterment are very far-reaching, and every citizen is affected, directly or indirectly, by fine river embankments, boulevards, open spaces, beautiful parks, and fine buildings. This may appear to be a sort of truism as to which we need no reminder, but architects, as well as other people, are liable to overlook the larger aspects of city growth and the way in which they affect the well-being of the individual. The emulation of the efforts of competitors in business as to the beauty and dignity of their buildings is a factor of much value to the architect, and the creation of finer streets, pleasanter sites, and general amenity gives more and better work to the architect, and puts more money into the pockets of building owners.

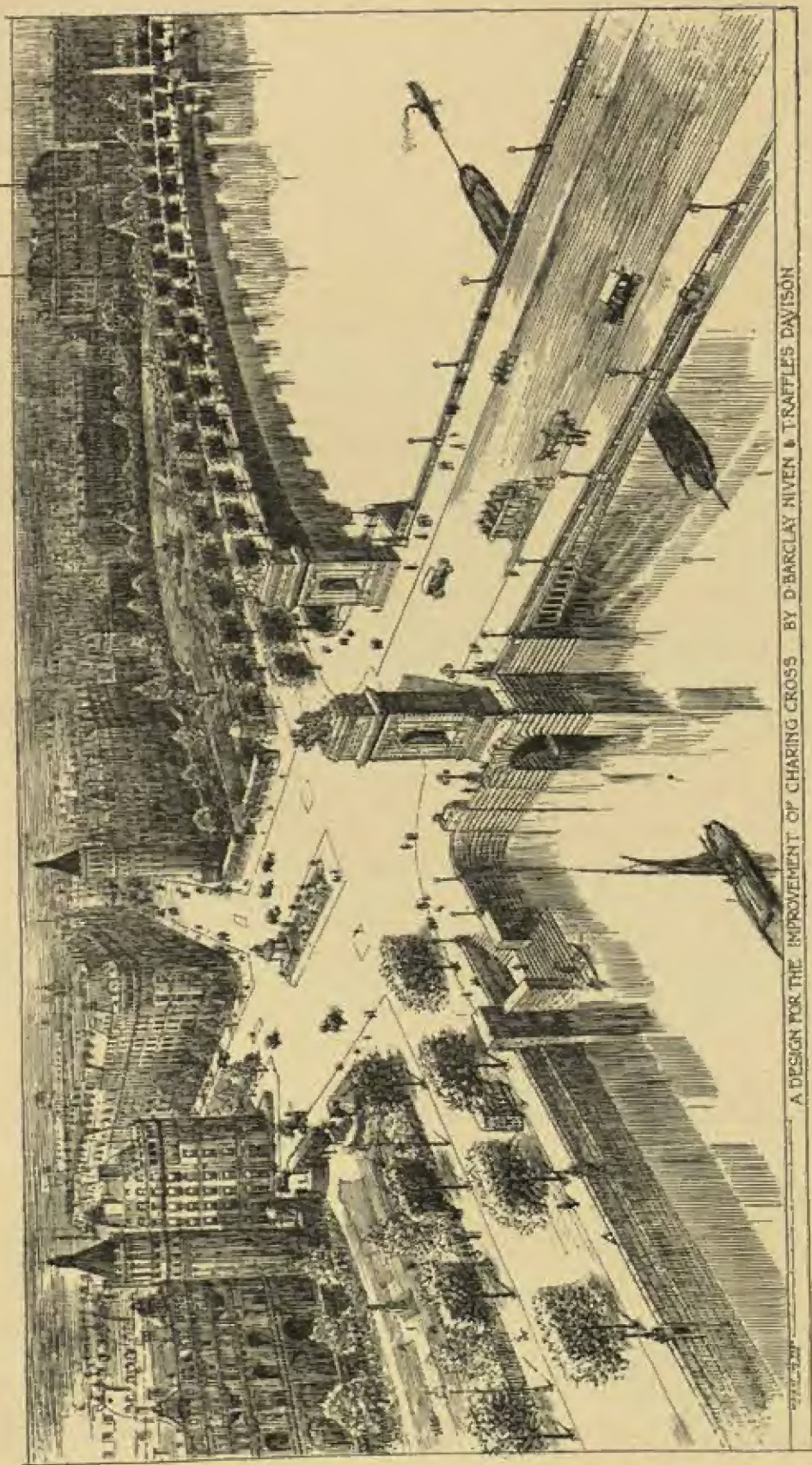
In considering the various methods by which both in this country and abroad the authorities undertaking specific improvements have endeavoured to obtain contributions from those who own



RE-ARRANGEMENT OF CHARGING CROSS WHEN THE STATION AND BRIDGE HAVE BEEN REMOVED AND A NEW VEHICULAR BUILDING HAS BEEN BUILT.

THE MAP APPROACH IS ALSO SHOWN RE-ARRANGED. BY D. BARCLAY NIVEN AND T. RAFFLES DAVISON.

Based upon the Ordnance Survey Map with the sanction of the Controller H. M. Stationery Office.



A DESIGN FOR THE IMPROVEMENT OF CHARING CROSS BY D. BARCLAY HIVEN & TRAFFLE'S DAVIDSON

property which benefits immediately therefrom, it is necessary to bear in mind that the whole question is of such recent origin that few definite data are available.

The following are the five different methods of procedure for obtaining recoupment in connection with improvements :—

1. The acquisition of only those properties the whole or portion of which are actually needed for the new street or widened thoroughfare.

2. The acquisition of more land than is actually needed for the improvement with a view to the formation of large and valuable sites fronting the new street.

3. The adoption of an heroic scheme involving the acquisition of properties in the neighbourhood of the improvement, with a view to abolishing slum or poor property and remodelling the district.

4. The acquisition of only that property which is required to be added to the public way, and the levying of an improvement charge upon the adjacent lands.

5. The adoption of the third method, viz., the heroic scheme, but by acquiring only the freehold and long leasehold interest, the short leasehold and other interests being allowed to run out.

These do not include any reference to the principle of Betterment, which is now on its trial. It was first considered in 1894, when a Committee of the House of Lords which considered and reported whether, in the case of improvements sanctioned by Parliament and effected by the expenditure of public funds, persons the value of whose property is clearly increased by an improvement could be equitably required to contribute to the cost. They reported that the principle of Betterment was not in itself unjust, and such persons could equitably be required to do so. The same Committee considered the relative merits of Betterment which extracts annual charges from all such persons, and of Recoupment whereby powers are given to an authority to take land beyond what is necessary for the actual execution of the work. This latter method was first adopted in 1877. In 1894 the Committee examined the results of recoupment and reported that everything which had been received was from persons who had had actual experience of the operation of the system. The general effect of this was that it had not been proved successful. The Committee was not, however, satisfied that it had ever been tried under circumstances calculated to make it successful, inasmuch as insufficient power had ever yet been given to local authorities to become possessed of the improved properties without buying out all the trade interests, a course which is inevitably attended with wasteful and extravagant expenditure. This would seem to permit the acquisition of the ground rents and freehold along a certain route, pending expiry of leases and extinction of trade interests, and this is the plan adopted in combination with Betterment in London's latest improvements at Kingsway.

The procedure with regard to Betterment is well illustrated in the Kingsway Improvement L.C.C. General Powers Act, 1897. It is hardly possible yet to summarise the result either of the Betterment or the Recoupment returns. The general feeling with regard to Betterment is that it is not a success owing to the heavy cost and the difficulty of proving increased values. But many think the area dealt with is too limited and the period for the fixing of the new valuations too short : also that the section giving objectors the right to demand the purchase of their property at the initial valuation is a mistake. The recent arbitrations upheld the L.C.C. and enforced the charges made upon the properties improved. The probability is that the principle is now established, but should be more boldly applied.

It has been argued by some that, as the buildings abutting upon a new thoroughfare would, after the improvement, have to pay a large increase in rates, they ought not to be called on to pay improvement charges in addition ; but it should be remembered that the most common case of all is that of a freeholder whose land requires re-development and who finds that it has a much greater potential value and will fetch a higher ground rent. A tenant comes in on his merits, with every expectation of paying whatever rates the building he occupies may be properly charged with. There are cases, however, where freeholders, having important buildings already on their land, which are

leased for very long terms, could under no circumstances derive any benefit from the improvement until the lease expired. The Holborn Restaurant is a case in point, and there the claim upon the freeholders has been recently dropped. These methods, however, only apply to cases where public money is used for the carrying out of the improvement, but there are many others, particularly those which are paid for out of the Bridge House Estates, or other City funds, under which the owners of property adjoining cannot be asked to make any contribution whatever, and this state of things cannot be regarded as satisfactory. If the principle is applied generally, means must be found whereby it can be made to apply in these special cases. Southwark Bridge and the new St. Paul's Bridge are cases in point.

OVERSIGHT AND DESIGN.

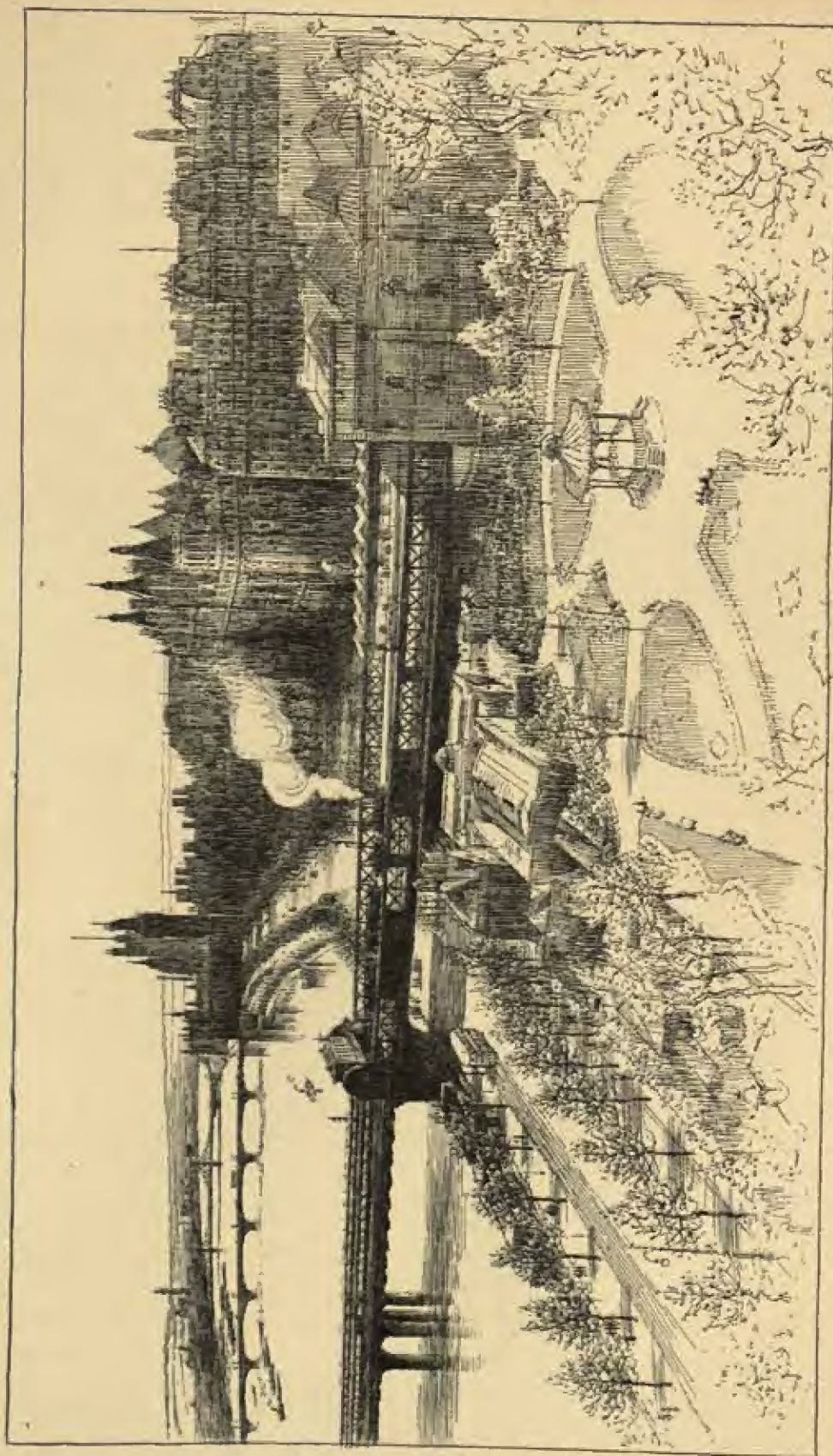
We should distinguish between the *government* of London and the *control* of its growth. A good system of government is not of itself enough, and that is one of the points which I take it the London Society is concerned about. You may have a very good system of government, and it may be adequately carried out, without having any sufficient oversight as to the city's growth. What is emphatically wanted is a continuous and insistent consideration of the problem involved in securing the best ideals of development. Even these ideals will necessarily be modified or changed in course of time, so that a task of this kind should last as long as the city endures. Thus we are faced with an endless demand on the highest qualities of the intellect, and it may well seem doubtful whether these can be obtained except by that splendid voluntary service which is one of the greatest triumphs of modern civilisation. One thing at least is certain. The kind of control which shall be really statesmanlike and of the highest value must either be paid for at a very high figure or be obtained for nothing, and probably the latter is the best. In such work there is a call for a power of detachment, for high enthusiasm, and for judicial balance, from access to which the chains of officialism for ever keep us back. It has seemed to the founders of the London Society that it would not only afford honourable distinction to those citizens who take part in this great oversight, but that such a work, in the variety of interests it excites, would be a reward in itself.

FORETHOUGHT.

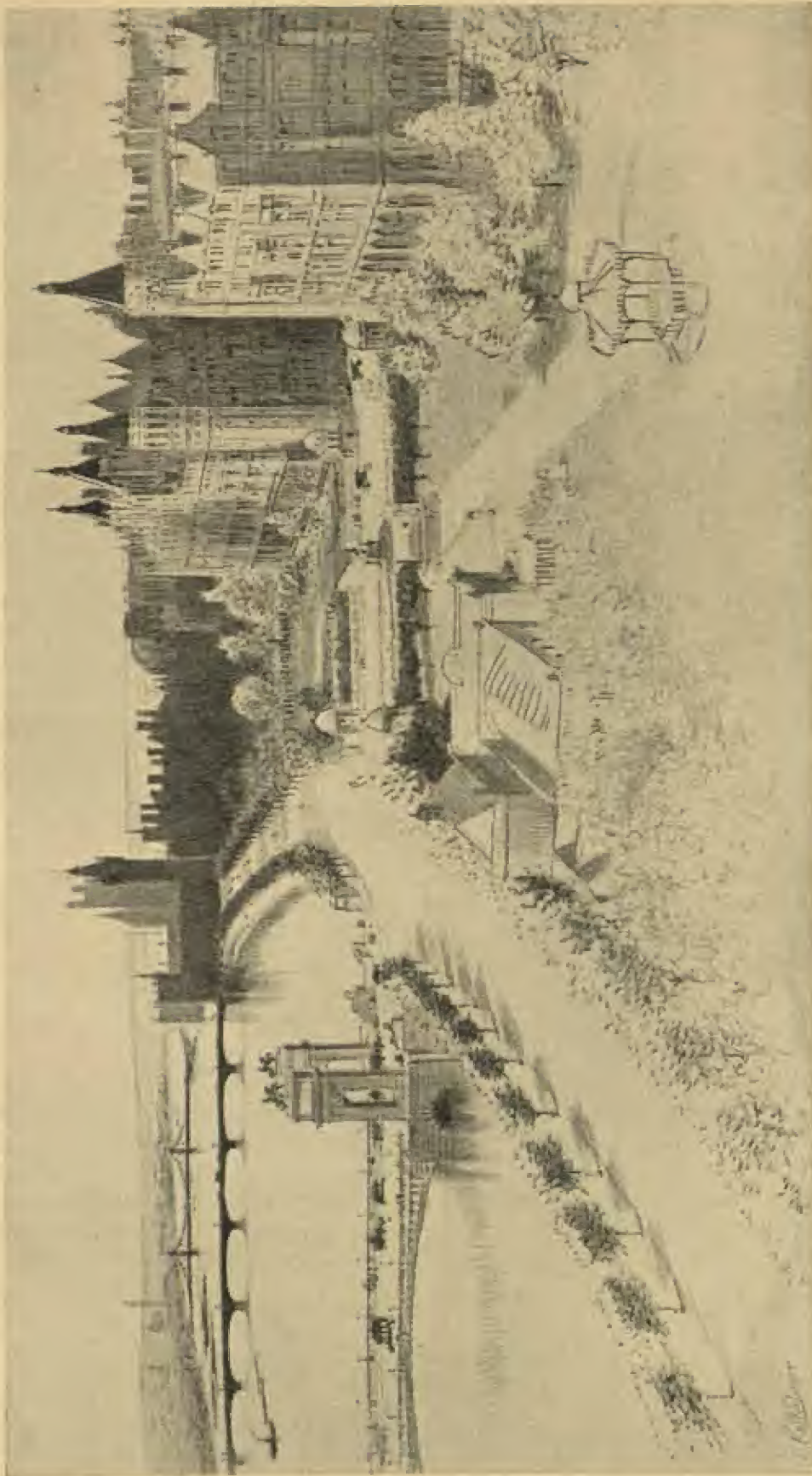
The gravest indictment we have to bring against London is lack of foresight. To stimulate forethought is perhaps more important than to try to remedy existing evils, many of which seem nearly hopeless.

It is because we find so many varying problems which call for solution that we realise the need for collaboration of thought and effort. You cannot deal with traffic or housing problems unless you consider also the general amenity of the city, and you cannot come to conclusions as to the best sites for certain buildings unless you have an idea as to the future development of the city. We have been told that the General Post Office need not have been planted down in the heart of the city, with its many hundreds of clerks, and that it would have been better farther out. If this had been thought of and settled long ago it might have been largely to the public benefit, and also to the large army of workers involved. We have been informed that the Post Office authorities are to girdle the city with an underground tube, which will make future underground railway development difficult. I do not state this as a fact, but it shows how largely one problem affects another, and that only by some far-seeing and statesmanlike control over all can every interest be kept in its right place and its due proportion.

My contention is that at present the prosecution of private business enterprise is transforming London at an alarming rate, and in a wholly haphazard way. If a business firm fixes upon a certain site for its works or offices it is probably doing so in a way which bars future improvements in the locality. If important future improvements are not planned and provided for we have no option but to allow great business premises to be erected where the owners may choose to select. The many



THE EMPRESS GARDENS AS THEY ARE.



THE EMBANKMENT GARDENS AS THEY MIGHT BE.

important premises which have been erected on the south side of the Thames add enormously to the difficulty of dealing adequately with that area.

We may suppose that what looks to us now as the incredible folly of the two or three generations before our own in thinking so little of the future of London is fairly well balanced by our own lack of foresight now. It is very easy for us to realise the folly of our forbears, for we see now clearly enough how they threw away one magnificent chance after another. But we are doing the same thing ourselves. Because great improvements are very costly we keep them over till they become more costly, or impossible. The only adequate legislation for London now is that which takes account of the progress which will be seen in fifty years to come, when the population and the area may have doubled, wealth enormously increased, and our present mean consideration of public improvements will be an impossible one. No enterprising and far-seeing man of business would leave the southern area of London as it is if he were running it as a business concern so as to get the best revenue out of the ground. He would do away with the squalid mean streets and get ten or twenty times the accommodation out of the area in a wholesome and pleasant fashion.

SOME PROBLEMS.

May I now briefly refer to a few of the outstanding problems which affect the beauty and well-being of London?

THE RAILWAY PROBLEM.

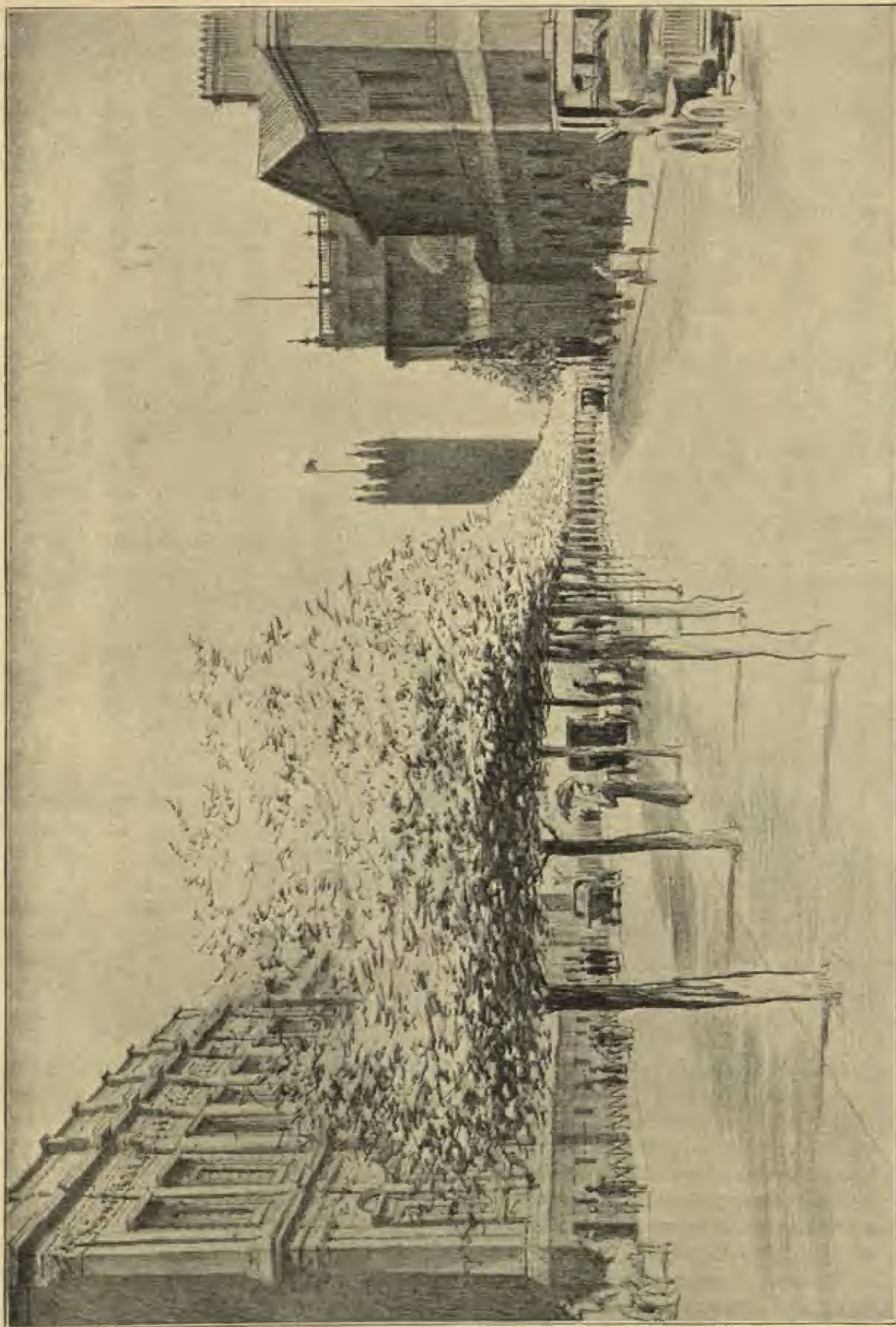
We all know well enough now that those important and useful servants of the public, the railway companies, obtained a free hand in laying down their lines and viaducts and stations from sixty to a hundred years ago because we could not foresee the marvellous progress we should make in travelling facilities, or that we should be wishful in 1914 to banish all steam-propelled railways from the city. It no doubt needs large courage and some faith in the future to attempt to fix limits and conditions for future railway enterprise—but is it not surely essential? Do we seriously contemplate a future in which these hideous viaducts and obtrusive stations and junctions are for ever to remain?

Mr. Paul Waterhouse has dealt with railway stations in his own graphic and interesting way, but with all his kindness and tact he could not manage to make out a very good case for them. It is very certain that the forecourts and general aspect of Cannon Street, Charing Cross, London Bridge, and King's Cross do not add much to the joys of existence. They appear to get every shilling's worth of revenue out of their approaches and forecourts. It needs little imagination to see that the fine open space about the front of King's Cross Station might have been dealt with in such a way as to have added to the value of all the property looking on to it and reflected some little credit on the railway company—though perhaps not the credit which would be accepted by a bank. Could not the railway problem of London be faced and some study be bestowed on the relations of their future development with the general welfare of the public and the aspect of the city?

The way to anything like great and drastic improvement of London, more especially with regard to the south side of the river, is blocked at the very outset by the condition of the railways. Is it not pertinent to press home the inquiry as to how long these obstacles to improvement are to endure? Are we for ever to accept the present condition of things? May we not look forward to, and actively prepare for, a future when all our city railways will have to disappear below ground? Is it conceivable that we shall accept this terrible *status quo* at Charing Cross, Ludgate Hill, Blackfriars, and London Bridge, where some of our finest city centres are hopelessly spoiled by these terrible nightmares of railway bridges? Is it worthy of London that we should calmly accept the dirty muddle that we encounter in and about the north end of Charing Cross railway bridge? As the London Society stands for Foresight and Forethought this is one of the most vital issues which lies before it.

TRAFALGAR SQUARE.

Our attention is periodically called to the beauty of Trafalgar Square. In truth it has possibilities and some qualities even now. But it will never be a fine square so long as the Nelson Column



WHITEHALL, WITH TREE-PLANTING DOWN THE CENTRE.

remains—one of the most ridiculous monuments and effigies which has ever memorialised a national hero. We can never give Trafalgar Square a scale which will hold such a thing. But other things are wrong with this Square. The commanding site and dignified mass of the National Gallery is dominated by one of the most absurd pepper-box domes in London. When you look at the south side of the Square everything is hopeless, though it might have been saved by a fine entrance to the Mall and a fine widening out of the Whitehall thoroughfare. The east and west sides of the Square are not parallel, and the buildings which face them are only so good that they might be worse. The

fountains are hardly less than ridiculous, and many citizens would be ashamed to have such a display in their private gardens. But a future could be made for Trafalgar Square if that controlling power we are looking for would insist that the new buildings which will take the place of the club on the west and the hotel on the east shall be built parallel to each other, of corresponding height and of at least passable elevation. The hotel, by a give-and-take line, might be so rebuilt as to be a gain both to private ownership and to the public convenience. Many suggestions have been made for the improvement of Trafalgar Square. The most essential thing of all is that the buildings which flank it to the east and west should be of a decently dignified character, and so designed as to give balance to the Square. The unhappy fountains, raking wall, and the general lay-out, ought to be improved. A central flight of steps up to the National Gallery might well replace the angle stairs.



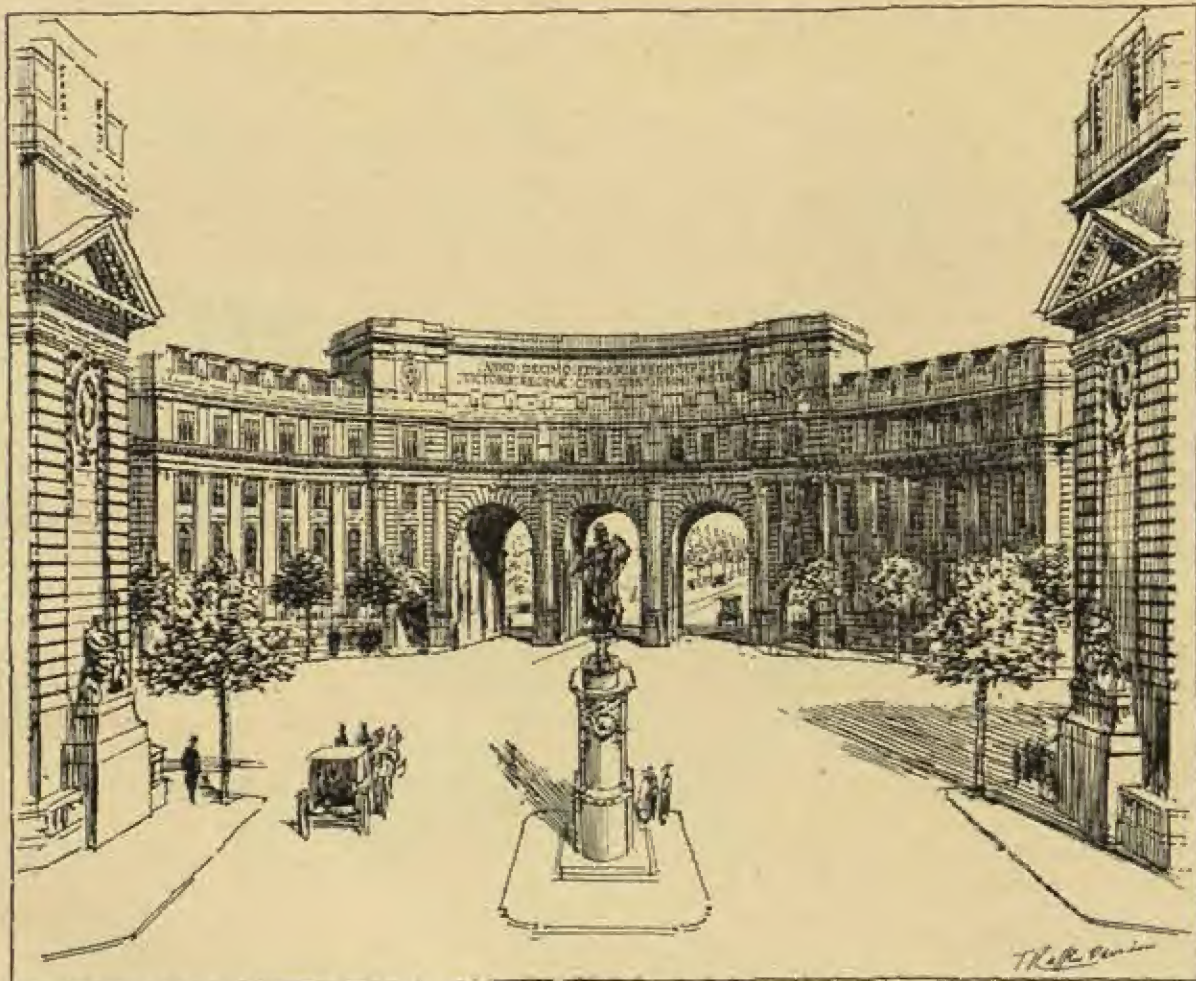
Statue of Chas I. cast in 1633 erected 1674. Hubert Le Sueur sculptor pedestal by Giesling Gibbons

CHARING CROSS.

Here is a view [p. 457] looking towards the site of the Charing Cross railway station. It includes the Embankment from the National Liberal Club to Cleopatra's Needle. The present Northumberland Avenue is taken as the axial line of a new road bridge across the river [pp. 456, 457]. A great "place" is formed at the junction of the new bridge with the Embankment. The National Liberal Club and the Hôtel Métropole are accepted, and in the drawing are merely repeated to show the value of balance. A new roadway radiates from this place to the Strand, in the same way as the Whitehall Place. All the rise necessary for the new bridge is now obtained within a length of 600

feet. This gradient of 1 in 50 is identical with Westminster, which is the easiest in London. The new street from the Strand to this "place" falls in an easier gradient—viz., 1 in 56. The recoupment in the value of building sites would be very large, and as the whole character of the neighbourhood would be altered when the existing high-level station and bridge were removed the value of the property affected would be enormously increased.

The advantage of a vehicular bridge at this point, midway between Waterloo and Westminster Bridges, would be very great, especially as this would be a bridge of the easiest possible gradient, very



SKETCH SUGGESTION FOR THE MALL APPROACH WITH THE KING EDWARD MEMORIAL IN THE CENTRE

different from the southern approach to Waterloo Bridge. I hope the sketch [p. 461] may convey some slight idea of the improvement to the most important centre of the city which one might call the hub of the Empire. The millions of inhabitants on the south side should be provided with the shortest possible connection, and a bridge in this position ought to do a great deal towards bringing the value of property on the south side up to that on the north.

THOROUGHFARES AND HOUSING.

Those schemes of improvement which more immediately affect the better districts are of course only one part of the whole problem; the fact is that such magnificent thoroughfares as Mile End Road have more of the elements of dignity and beauty than our ill-fated new streets like Shaftesbury

Avenue, Charing Cross Road, and Northumberland Avenue, in which a proper scale is lost. The beautifying of some of the East End thoroughfares is practicable enough, if dealt with in the right way. I cannot but think that tree-planting might be carried out on a much more extended scale. In many thoroughfares we might surely have clipped trees, which are so common abroad, so as to give variety and charm to the streets. I have ventured to suggest how this might be done in Whitehall [p. 463]. Then, of course, housing schemes, bound up as they are with traffic problems, need a much nicer consideration than they usually have received. I remember noting a suggestion that a large area on the south side of the river should be ruled out with geometrical lines into a housing estate, apparently without regard to the effect it might have on the general amenities or trade of the district.

THE MALL APPROACH AND KING EDWARD MEMORIAL.

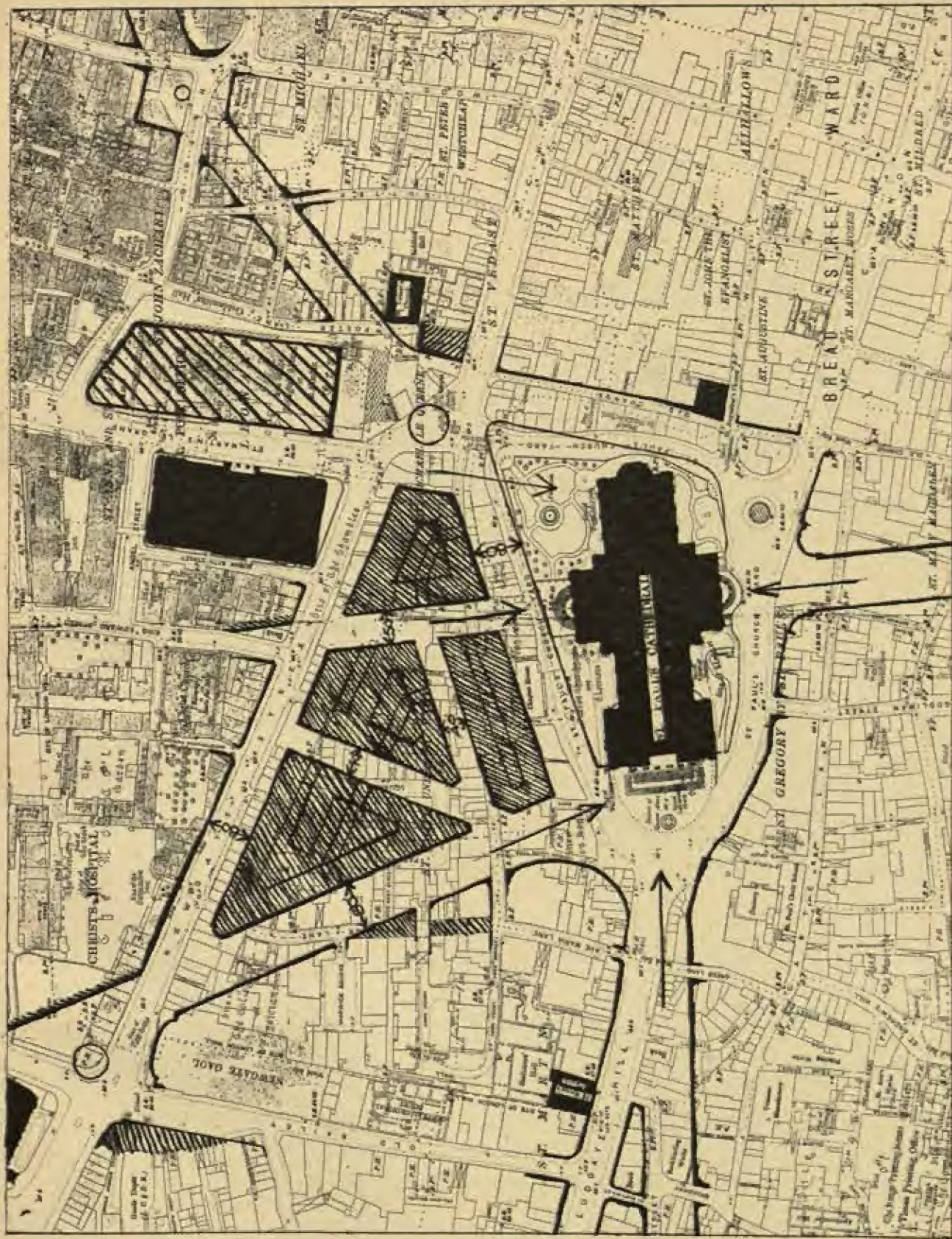
The site for the King Edward Memorial has been the subject of much discussion, and the fact that this discussion has been re-opened in a most energetic way within the last two months shows how great is the dissatisfaction as to the site in Waterloo Place. The Memorial Committee have had a very difficult task, and they individually command the highest respect. But since their consideration of the matter a different state of affairs has arisen as to the opening out of the Mall Approach.

Here is a great processional road leading from the City to the Palace. In front of the Palace stands the memorial to the greatest Queen that ever lived—and the processional road, the Victoria Memorial, and the newly fronted palace, form a memento of the whole Victorian era. The late King Edward carried the burden of royalty through many years of that era. Long before he actually reigned he practically lived the life of a ruling monarch, and his ten years' reign completed and crowned his reign over the hearts of the English people. Such a King surely deserves to have a prominent place in our great memorials, and the most appropriate place would naturally be as a frontispiece to the whole—at that point where the Mall entrance links the palace with the city [see p. 465]. Numbers of those whose opinion is at least as valuable as any in the land affirm that such a site is the only one possible. The symbolical significance and the architectural effect to be gained by such a site for the King Edward Memorial can surely not be denied. Is it, then, impossible to get over all other difficulties which intervene, and to create for once in our time a great memorial of a great epoch?

SURROUNDINGS OF ST. PAUL'S.

As an illustration of what should be possible by adopting a prearranged scheme of rebuilding certain estates, as leases fall in, in congested neighbourhoods, the Paternoster Square area between Newgate Street and St. Paul's Cathedral has been diagrammatically treated in the accompanying plan [p. 467]. In this Newgate Street and St. Paul's Churchyard are shown as widened each to 80 feet, and a new road of the same width is cut through from the west front of the Cathedral towards Smithfield to take the traffic from that district and from the Meat Markets to the new St. Paul's Bridge. The traffic from Aldersgate Street and the traffic from Liverpool Street (by way of a new road) would come by the east end of the Cathedral to the same bridge. The bridge in this scheme is shown converging on the dome of the Cathedral, thus we should have the diverging traffic from the bridge merging with the eastern traffic before crossing to the north-east by St. Martin's-le-Grand, and with the west-flowing traffic before joining to the north-west in the direction of Smithfield.

In the area dealt with between Newgate Street and St. Paul's Churchyard, exclusive of cross streets and lanes, there is approximately 400,000 superficial feet. In the corresponding area, as reduced by the 80-foot-wide bounding streets, and by the three cross roads running through it, there remains 253,000 superficial feet. But the present buildings, by observation, do not exceed on an average 48 feet in height from the pavement, whereas in their scheme, in order to get a more than equal amount of floor space, it will be necessary to erect the new buildings which front 80-foot-wide bounding streets six floors high, say 72 feet to the cornice, *plus* two floors in the roof. Those buildings fronting to cross



PLAN SUGGESTING POSSIBILITIES BY RE-BUILDING THE AREA NORTH OF ST. PAUL'S CATHEDRAL. By D. Barclay Niven.
Based upon the Ordnance Survey Map with the sanction of the Controller H.M. Stationery Office.

roads (two of which are 40 feet wide and one 50 feet) must be 48 feet high to the cornice, *plus* two floors in the roof. This would give an angle of light of almost 45 degrees in every case; give 1,900 lineal feet of frontage to external 80-feet-wide streets, and 800 feet frontage to the cross streets, as against an existing 1,800 feet of external frontage *plus* the frontage to the narrow internal lanes, Paternoster Row, Paternoster Square, etc., which, on an average, are not more than 20 feet wide. All this, too, is exclusive of the farther side of the proposed new 80-feet-wide road towards Smithfield, over 600 feet long. All this new building, being bounded by such wide streets, would not interfere with any rights of light. The proposals would largely improve the value of surrounding property. By setting back buildings from the Cathedral it would lessen the fire risk to the fabric, and would also increase the area of garden ground in the churchyard. Delightful vistas of the Cathedral would be opened up from St. Martin's-le-Grand, from Christ Church, from St. Sepulchre's Church, and from the bridge itself.

The principal building of note which this rebuilding would interfere with is the Chapter House, but presumably the advantage to the Cathedral in other ways would be so great that the authorities would agree to this building being re-erected on another and more suitable site.

CITY CENTRES AND SPACES.

The northern approach to London Bridge from King William's statue offered one of the finest chances we have had for generations, and will probably be long remembered as the greatest failure of all that London has been guilty of to create a noble improvement in a comparatively easy way. All the property on either side was ready for rebuilding, and a fine scheme for a dignified architectural treatment was obviously called for. One would have thought some City Companies might have united to take over the old Pearl Assurance buildings and erect a fine building such as would balance the dignified block of the Fishmongers' Hall on the western side. Instead of that, this incomparable site has been sold by auction, and it will probably be made a business success by building it well up into the sky and nearly shutting out from view the Church of St. Philip Magnus and Wren's fine Monument.

So far as appears to be known at present the adoption of a fine scheme like Norman Shaw's, or a possibly more practicable one by Mr. John Murray, for the remodelling of Piccadilly Circus is no nearer realisation, and the junction of three of London's finest streets is left a hopeless muddle.

The old Post Office site at St. Martin's-le-Grand has been the subject of much discussion, and great efforts have been made to persuade the authorities to take advantage of its clearance, first to improve the traffic, second to secure St. Vedast's Church from destruction, and third to add to the beauty and dignity of the city. Up to the present all these efforts have failed. The new St. Paul's Bridge approach will have no fine architectural feature to face it, which the south end of the new Post Office might have afforded. No provision has been left for a possible future roadway from Newgate Street to Finsbury Circus or Liverpool Street, and instead of a finer and better city effect we shall have a worse one. We can only point to another lamentable failure to take advantage of inevitable changes to make great improvements.

The open space about Constitution Hill and Hyde Park Corner bears very great possibilities which have been suggested by Professor Adshead and others, but it appears to be good enough for London as it is. At the Marble Arch something extremely fine might have been done, and in the strictly utilitarian character of what was accomplished there is a poor response indeed to the great efforts which a private citizen of London made to urge the adoption of a scheme worthy of so great an opportunity.

THE RIVER AND BRIDGES.

I suppose if we were to theorise on the subject we should be inclined to say that the river banks in a town should always have been public property and remain so. But look at London now and see

what enormous outlay would be needful to bring about this very desirable state of things. In his interesting paper on the Development of London and the London Building Acts,* Mr. Davidge points out that there have been many recurring struggles to resist encroachments by the projection of wharves and embankments into the river.

The problem of the river, its traffic, its bridges, and its banks is a great one, and it will never be properly solved in the piecemeal way we do it. London Bridge has been widened and spoilt. Waterloo Bridge is too narrow and in a bad structural state. Blackfriars Bridge is spoilt by the railway bridge alongside it. We need a new road bridge at Charing Cross. We are improving Southwark Bridge—it is said unnecessarily. We are projecting a new St. Paul's Bridge before any related scheme of better town planning is devised in regard to it. A new Lambeth Bridge is proposed. Amongst the lot of them there is not one with covered footways.



As an illustration of how the aspect of our streets is affected by the interest of individual effort, we have had a photograph taken of No. 4 John Street, Bedford Row, where the little fig tree makes a refreshing point of light and colour in the uniformity of the street. If individuals did this kind of thing more frequently our streets would be greatly brightened and improved.—T. R. D.

ILLUMINATION.

The art of illumination may at present perhaps be more properly described as a science. That you can illuminate the streets of a city in a very inartistic way is at all events a very palpable fact. But a curious point as to street lighting is the fact that conservatism reigns supreme under the very walls of the Houses of Parliament. This has doubtless escaped the eyes of the present Government. An area which includes some of the most important buildings in London is still lighted by a system established in about 1851. The existing gas lighting in Parliament Square and the approaches to the Houses of Parliament by low standards of small candle-power was put up in 1851, and has not since been improved except by substituting the old bat's-wing burners with incandescent mantles. Since 1851 the standard of street lighting has altered out of all recognition, and during the last ten years the change has been particularly rapid owing to the increase in the speed of the traffic demanding more general and even illumination. At present this area is one of the worst-lit parts in London,

* JOURNAL R.I.B.A., 11th April 1914.

and as the surrounding streets are brilliantly lighted, some with gas and some with electricity, a motor-car driving through Parliament Street plunges from bright light to darkness. This is made worse by the fact that the only illumination is at such a small height above the ground (about 11 feet) that little blobs of light shine directly in the eyes of the driver, but leave the road very dark.

His Majesty's Office of Works, however, realises the need for an improvement, and are conducting experiments with the most modern forms of electric lighting, arranged in such a way as to give not only a bright light, but the most even illumination possible on the roadway. It is proposed to erect about twenty standards, each carrying two arc lamps 27 feet above the ground. Each arc lamp gives between 2,000 and 3,000 c.p.—that is to say, 4,000 to 6,000 c.p. per post. These twenty arc-lamp-posts will supersede about ninety gas-lamp-posts which are said to give 50 candle-power each. The standards are specially designed to harmonise with the surrounding architectural features.

The whole problem of illumination in our streets is an interesting one, promising many fresh developments.

CONCLUSION.

Under an appalling cloud of practical difficulties and necessities the idealist must find his way onward. Traffic, housing, building laws, sanitation, light and air, illumination, better town planning, the long inheritance of past abuses and mistakes, rates and loans, Government, and—worst of all—politics confront his path at every turn.* How shall he make headway against it all?

The provision of fine schemes may be counted upon, but it is obvious they do not very quickly act upon the imagination of the citizens of London or their governing bodies. And here we come to the serious part in regard to the future development of London. By what means can it be made possible that adequate thought and study can be bestowed upon it and power be created to carry out adequate far-seeing schemes? The work is so great, so complicated, and so costly that nothing short of a continuous and vigilant oversight by somebody which will represent the most enlightened opinion of the day seems likely to cope with the problem. The object to be attained, which is one of the worthiest it is possible to conceive, is not the only reward for those who take part in the work. Those who devote their various talents to the creation and maintenance of an ideal city will find many rewards in the work itself. Intellectually and socially such work provides a good interest on the outlay involved. The variety of problems to be solved and the conflict of ideas as to their solution brings us into contact with each other in a way which cannot fail to be beneficial all round.

You cannot study properly such a problem as that of the south side of the Thames unless you call in the advice of experts of many kinds. River traffic and tides, bridge design and mud deposits, railway interests and the trend of commerce, town planning with all its difficulties, the principle of betterment and its application, the general design of an embankment, the question of high and low level roads, the better union of north and south sides of the city—these and numberless other things present a problem almost as difficult as that of perpetual motion.

Wherever we turn we are confronted with the exasperating failure to appreciate and seize opportunities which would have given to London numberless points of interest and charm. What is wrong with us that we fail so signally to recreate London in a way worthy of her greatness and her opportunities? Is it that our rulers do not care? Is it that our citizens do not care? Is it that we have not schemes enough before us? Is it that we have not enough practical common sense to realise the value of ideality, or that we cannot make improvement schemes to pay? Something is wrong, and to find out what it is and how things can be remedied is an aim of the London Society. That every scheme will pay in immediate cash returns like Northumberland Avenue it would be absurd to try and demonstrate. But in proportion to its size the civic pride of citizens in London is a drop in the ocean compared to Munich, or Cologne, or Düsseldorf.

We are all out to make money chiefly. It is a bad aim. But we need not deceive ourselves overmuch. Behind all this there is some sentiment and ideality still left. The very expression we often hear,

"Dear old dirty London," tells its tale. So we can count on sentiment, we can count on civic pride, and we may count on the increasing sense of people to understand that fine cities pay a rich return. The love, the hope, and the inspiration that her citizens feel about London are the forces with which we must work, and which we must keep for ever active.

What better hope can be found than the steady and earnest stimulus of a society which worthily fulfils the aims I have endeavoured to set before you, which seeks to unite all that is best in human endeavour for the creation and maintenance of a fair and beautiful city?



DERELICT LONDON AS SEEN FROM THE HÔTEL CECIL.

DISCUSSION ON THE FOREGOING PAPER.

Mr. H. V. LANCHESTER, *Vice-President*, in the Chair.

MR. CARMICHAEL THOMAS, Chairman of the Executive Committee of the London Society, rising at the request of the Chairman to propose a vote of thanks, said he had a tremendous admiration for Mr. Raffles Davison. He had had the pleasure of working with him since the inauguration of the London Society, and had never come across anyone so full of ideas, ingenuity, and imagination. This must have been evident to all who had followed his description of what he wished to do with London. The London Society was a society of suggestion, and they had to go rather carefully. It was their cue to take anyone like Mr. Raffles Davison and get all the best ideas they could out of him for the beautification of London, and then, if necessary, "to sit on his head"! Some members of the Executive Committee—and he took himself as an example—were just ordinary men-in-the-street, but they had to deal with architects and others who knew what they were talking about, but whose ideals were sometimes a little too high. With regard to Trafalgar Square, there was plenty of room for improvement, by taking away the "pepper boxes" from the National Gallery on the north side, and altering, perhaps, the eastern

and western sides. He doubted whether it would be advisable to touch the Nelson Column. In matters of that sort they had to proceed carefully. But he could assure the meeting that it was a very great advantage to have on the Committee such gentlemen as Mr. Raffles Davison with all his ideas, and he believed there was a very great future for the Society. He was sure they would all agree that they owed Mr. Raffles Davison a debt of gratitude for his very interesting and suggestive paper.

MR. R. W. GRANVILLE-SMITH, Mayor of Westminster, said that of course they all sympathised with the aims of the London Society; but in the classic building in which they were now met they had to consider, he believed, the claims of architecture pure and simple. He thus felt some doubt as to whether he should speak on the architecture of London, or whether he ought to indulge in those delightful dreams on the improvement of London which formed the basis of the London Society, and which had been given expression to by the lecturer that evening in a way he had never heard equalled, nor put forward in such a convincing spirit. He ventured, however, in his capacity as

Chief, for a short time, of the authority who ruled over what must be recognised as the most important part of London, to tender to Mr. Raffles Davison his most sincere and heartfelt thanks for putting before them an ideal which some of them may have dreamt of, but which had never been placed in such concrete form before a London audience, to be received by them with unanimous approval. He thanked God that he had lived to this day, because, speaking as an old man, it was not always so. Had it been, they would not have seen some of those horrors which Mr. Davison had depicted to them in so graphic a manner. In that fine spirit of optimism which animated him, Mr. Davison had given them a little touch of what he thought when he spoke of the "atmosphere." No doubt some of those present had read those charming works of Henri Havard in which he talked about the "atmosphere" of Amsterdam. There, in the midst of mean and sordid surroundings, one was conscious of that marvellous charm of atmosphere which irradiated the scene in a beauty all its own. He had never read those words without thinking that we Londoners had also something of that Amsterdam charm in our own atmosphere. We had it in the paintings of Turner, which brought the sun right down into our atmosphere, and taught the British artist that love of colour which no other school had so fully appreciated. Therefore, London was a place to be proud of, a place to delight the eye, a place to love. But the lecturer had led them through some very difficult problems, problems which would only be solved by reference to pounds, shillings, and pence. He could not help thinking that Mr. Raffles Davison did not quite realise the difficulties which arose when, in this twentieth century, one endeavoured to correct the accumulated errors of preceding ages. There was always that eternal question of cost, which made it impossible for the best-intentioned County or City Council to do many of the things they wished to do. He should like to say that it was not the three great authorities which Mr. Davison mentioned which were to blame for—to take an example—Trafalgar Square; it was the heedlessness of previous ages, and the lack of the sense of beauty which had somehow blinded the eyes of their forefathers. What was the use of saying that the two sides of Trafalgar Square were not symmetrical—that something might be done to improve Morley's Hotel on the one side, and the Union Club on the other? As a matter of fact, these buildings were the only redeeming points in the Square. Why should anybody spoil them? Why did not the lecturer bring his great guns to bear on the monstrous height of the Grand Hotel? That was the thing that ought to be swept away. And when he had a little leisure betweentimes he might demolish that still more unworthy group which stood between Northumberland Avenue and Whitehall. Those were the buildings one wanted to see swept off the face of the earth. But how were they to do it? Did the lecturer know of any force which would

rid them of these buildings, which ruined all sense of proportion and spoiled the Square? The City Councils had no mandate to beautify London. What could they do? What would be the result if they devoted themselves to piling up the rates? There was no doubt they would be sent about their business at the next election, as had happened to the members of other bodies. To his mind, the one thing necessary to obtain in London was a greater artistic perception, a greater perception of beauty on the part of all, from the highest citizen to the lowest. Whenever he went abroad and talked, say, in the smoking-room of a foreign hotel, he found English gentlemen reason with intense artistic conviction on the beauties they had seen in the course of their travels. Never could one hear the praises of, say, the Bridge of Prague or the varying charms of "Isar flowing rapidly," so eloquently described as by the average cultured Englishman. But they were the *élite* of the people and understood these things. What of the common people? The common people of this land were insufficiently trained to see the line of beauty; they were indifferent to it, and that was the root of the whole question. Abroad, thanks to the artistic schools which existed, for instance, in that glorious city of Munich, where every day was an enjoyment because one felt that art permeated the whole city, and was in a sense the very atmosphere one breathed, the spoiling of a fine site would be resented by the obscurest individual as well as by the highest prophet of art. One thing which had to be done, whether by the London Society, or by the County Council, or by any other body, was to inculcate in the people a greater and purer sentiment, so as to make impossible those monstrosities which Mr. Davison had so graphically put before them. They would then be able to appreciate that artistic spirit which had been displayed in the delightful lecture they had listened to that evening.

SIR JOHN BENN, L.C.C., said that the lecture had been of a delightfully provocative character. He was glad and grateful to have been present, if only for the purpose of saying "Thank you!" to those who were taking an interest in the artistic side of London. To hear Mr. Raffles Davison rattle along with all sorts of suggestions and ideals was most refreshing to one who had had 25 years' hard labour on the London County Council. It was a great thing to have a body of men—and, he trusted, women—united in looking at this side of London. It was all very well to blame our forebears, but we ourselves were, to a large extent, responsible for our day and generation. The London Society were doing a great work in stirring up people's minds, and if there was any inartistic crime going forward, they had more or less the courage to denounce it. As an old citizen of London, he was deeply concerned in these ideals, and he hoped Mr. Raffles Davison would go on preaching and would not become discouraged. The day will come (concluded the speaker), if we labour on the lines of these

fine ideals, when our great city will be more united than it is; when we shall see the growth of the civic artistic spirit of which Mr. Davison has spoken so eloquently. It may not be in our own time, but if we have the privilege of ministering to this end, we shall at least have the satisfaction of having had a hand in a result which will be in all respects worthy of our great Empire City.

SIR ASTON WEBB, C.B., K.C.V.O., R.A. [F.], said that the London Society were greatly indebted to such men as Mr. Raffles Davison for the energy and enthusiasm which they brought to bear on the Society's work. He was glad to say they had got several Raffles Davisons—men who had wonderful energy and enthusiasm, and a real love for London, and there seemed no limit to the time which they were willing to devote to the objects they had in view. Those delightful drawings which Mr. Davison had shown were not produced in a day; they took a long time to produce, and were the result of enthusiasm in a very busy life. He must say that he was a little disappointed that Mr. Davison had not shown some shops and covered ways in his design for the bridge he proposed at Charing Cross. But he did point out, and it was important that they should keep on pointing out, that bridges across the Thames ought to be covered. It was brutal to expect people to cross those bridges on a pouring wet and windy day without any protection. It was admitted that the bridges would be more picturesque and attractive if they had coverings, and people would be more inclined to cross them. Southwark Bridge was being rebuilt, St. Paul's Bridge was to be built, and also Lambeth Bridge; if we did not get this protection for the bridges now it would be too late. This was one of the things which the London Society could take up. The Mayor of Westminster seemed to think there was no money, and so we could not carry out such schemes and might laugh at ideals. But it was wonderful how money came in for things which the people really wanted. One remembered the Underground Railway, dirty and smoky, and nobody wanted to travel by it. And when it was suggested that it should be electrified, people said: "Look at the expense! It does not pay now; what would happen if you went to the cost of electrifying it? It would be much worse." But enthusiastic people came along and did it. The money was found, and the railway was in a better and more flourishing state than it had ever seemed possible to hope for. If a good case was shown, there were plenty of people in London to back it up. The London Society might also help in regard to street architecture. It was the fashion among tradespeople to say that they must have continuous glass windows, and it had been said so often that people were beginning to think that it was true, and that it was necessary in the interests of shopkeepers for their magnificent premises to have no other apparent support than sheets of plate-glass. At a meeting of

the London Society that was the view expressed. But one of their largest tradesmen, Mr. Selfridge, got up and said that he did not agree with it at all, that good architectural piers were an absolute advantage to the goods displayed in a shop-window. This was a point which the London Society had been trying for a long time to impress upon tradespeople, and he was in hopes that the pendulum would now swing in that direction. Goods did not look well behind continuous sheets of glass; but if the space was divided by good piers, the advantage to the display was incalculable and added to the architectural effect and amenities of the street. Regent Street was being rebuilt, and it was impossible to exaggerate the necessity of driving home that it must not have these continuous glass fronts. They might be suitable for Brompton Road, but they were not suitable for Regent Street, where people expected fine things to be shown in a fine way. In Berlin they did not think it necessary; there they exhibited only one or two things in the window, and these looked much more precious when taken singly. Take the case of the Royal Academy. There, for want of space, the pictures had to be arranged close together, and everyone knew that that did not give the best effect to a picture. A beautiful picture surrounded by others close to it lost much of its effect. And it was the same with blouses and bonnets. If you had a 100 feet exhibit of blouses they looked badly; if you had one or two only they looked worth three times as much. One of the objects of the London Society was to see to these things. Debenham & Freebody built their own shop with piers, and Selfridge had built a fine building, also with piers; Whiteley's new premises also have piers, though unfortunately they have cut out half of them. Take another matter, the railways—a far more difficult thing. People would not go on putting up with getting out at King's Cross, and getting into a taxi with their luggage, in order to cross London on their journey to Dover; there would be a demand for facilities to come through from Liverpool and such places to Dover and places in the South, and the Westminster and other Councils would say: "You shall not come on the surface; you are a source of defilement to our streets, and if you must go, you must go under ground." That was the proper course. It was not possible when railways first came, because they were steam-driven engines, but now that they could be electrified there was no reason why they should not be under ground. And they would have to go under ground, and the tracks above would become splendid boulevards with fine houses and shops, which would go largely to pay for the expense of these underground channels. Those were some of the ideals which the London Society tried, and hoped, to keep before the people. He was sure the public authorities would be grateful to them; they wanted to do these things, and they would do them if they had public opinion behind them. Si

John Benn, he was sure, would put the railways under ground to-morrow, if he could. He would like to join in the most hearty thanks to Mr. Raffles Davison for his admirable paper.

MR. LYON THOMSON, F.S.A., said he had listened with great interest to Mr. Davison's brilliant thesis on the old theme that somebody ought to do something. Who that somebody was we had not yet arrived at, and he thought it was a good thing for that somebody that we had not. We talked of a body other than our own, a central body, to do something. He was afraid, with all due respect to the past, that even the present body, which was a central body, was not altogether impeccable. When we had such a scandalous thing, even within the last few months, as our central body selling a roadway of one of the great zone roads for building purposes, and putting up a 40 feet roadway through Westminster, when Wandsworth had determined on a 60 feet road, it should be a reminder that even with the ancients we could hold our own. He was afraid that in his enthusiasm Mr. Raffles Davison had lost sight of the fact that London was a very prosaic place, intended for practical people, and that it was not intended as a rambling ground for dreamy poets. He had proposed, for instance, to take away Charing Cross Railway Station, and to substitute for it practically three Ludgate Circuses on the road to it: one at Trafalgar Square, another on the Embankment, and another on the South side. The trams stopped each side of the Embankment on the South side, but there were no trams shown in his scheme. What happened to them? Did they fly into the air and come down on the other side? He thought the person who was in a hurry to catch a train would give vent to his feelings in such a way that the central obelisk would have to be replaced by a statue of Bernard Shaw! There was one portion of the paper which he quite agreed with, and that was as to the extension of the Embankment and the gardens, because it might be a convenient dumping-ground for the various memorials put up all over London! Therefore the London Society, if it did nothing else, would do much by keeping a vigilant eye on the erection of memorials, and thus deserve well of the community!

SIR LAURENCE GOMME, F.S.A., Clerk of the London County Council, said that after the practical speech they had just heard, he wanted to return to the ideal. And to those who had an ideal about London he wanted to suggest that the beauty of mediæval London was a factor which they should consider in thinking of what should be the fate of modern London. In mediæval London, he was certain, it was considered by all the citizens a crime to put up ugly buildings. It was only because we had lost the sense of communal feeling that the people would not stand ugliness that we were suffering from our present ills. We, forsooth, send thousands of our pupils to art schools in London, and we turned them

out at once into Bermondsey and Shepherd's Bush. The extraordinary thing was, not that we had ~~no~~ little art, but that we had so much. The need of the whole situation was that we wanted a point of view, and Mr. Davison's paper had, at all events, suggested that the point of view we ought to have was the relationship of one part of London to another; that it was not only one section of London which should be beautiful and the rest ugly, but it was the joining of the North and the South, of the East and the West; that that great eastern road—the Mile End Road—which, as had been pointed out, was a beautiful thing, should be repeated in the West; and that, finally, we should be able to get a London which answered the purpose of its citizens, and that purpose should be the beautiful, as well as the practical side. He would give one single instance of the sort of thing which London puts up with, and which no other city—Berlin, Vienna, Madrid, even Moscow and St. Petersburg, which were supposed to be cities of a not very civilised country—would tolerate, but what we tolerate in Bond Street and Baker Street at this day. We have little excrescences of pavements in front of the shops, which the ordinary pedestrian tumbled over and found a very considerable nuisance. They were relics of a past building era. And yet our authorities tolerated that sort of thing going on. Instead of sweeping away these little excrescences they allowed them to remain, narrowing still further the public footways. He only mentioned that as one of the small instances which public authorities might give attention to to improve the amenities of our city. He was one of those who had, he was afraid, suffered for his ideals throughout the whole of his life, ideals that had never been carried out, and it was a joy to him to think that the London Society, at all events, advanced the ideal of London life. And if we would only consider the young citizen who was coming along and induce him to entertain some of these ideals there would be a chance of them being carried out. He would remind them that when the rebuilding of London was contemplated after the Great Fire of 1666, there stood up in the House of Commons at that date a certain Colonel Birch, who proclaimed, in a remarkable speech which is recorded in *Pepys' Diary*, that London should be looked upon as one building estate, that it should be laid out on a certain system, and that the landlords should be compelled to conform to that system, for, in the end, the landlords themselves would benefit. At the present time we found all sorts of narrow prejudices against the system of the development of London; but if the landlords of London would only combine and form a London Society, and say "What is good for the whole of London is good for us," we should in that way solve many of the problems which confront us.

MR. HERBERT G. IBBERSON [F.] said he would like to associate himself with the vote of thanks. But his feelings were not only of gratitude, but of despair. Great as the difficulties which the London Society

had to face in awakening a sense of imagination in Authorities, they had also a greater one—the developing a race of architects with a sense of style. What was the saddest thing in the views which had been thrown upon the screen? Not that the buildings were *as groups* unconsidered, irregular, hotch-potch, but that *individually* they were so depressing. Would they not have been even more depressing if surrounding the stately squares of the town planner? He had been observing the new Regent Street on his way to the Institute. It was grievous, of course, to see the gracious lines of Nash destroyed, but if the new ventures had been lowered into conformity, would they, even then, have filled the judicious with joy? Was not the trail of commercialism over them all in a way that even the despised early Victorians would not have tolerated? The other day he had received a communication eminently characteristic of the age. A firm of lawyers wanted some land for building on an extensive scale in London. Could he find them the land? If so he should “have the job.” They knew nothing of him, or his work, and cared nothing—all they wanted was the line of least resistance! And was not this, in principle, the way in which that thing of no importance, the architect, was so often chosen? He could get the land, or find the money, or had married the daughter! Until the London Society can make “the public” really care for the things of the spirit, as well as the “authorities” realise that men do not live by bread alone, we may Haussmannise and plan, make the crooked straight and the narrow broad, but we shall never get the London beautiful.

THE CHAIRMAN, in putting the vote to the meeting, said he was sure his *confrères* would acquit him of lack of interest in this subject if he did not add anything to the enlightening remarks they had had from some speakers, whom they were all glad to welcome. Mr. Davison had broken exciting and interesting ground, and the Paper followed somewhat on the Paper which Mr. Davidge had read a few weeks ago. He hoped they would read them both, for Mr. Davidge's Paper formed a very striking commentary on our roads.

MR. RAFFLES DAVISON, in reply, said that it had been a great pleasure to him to spend so many millions with them that evening. But he would just like to say: Don't be despondent, and don't give the London Society too much to do. They could not expect them to do everything. One thing they wished to do was to try to create a want, to stimulate the interest of the citizens of London. They would welcome every scheme for its improvement; they did not expect to formulate schemes themselves, though he had ventured to show some which had been formulated; they were, perhaps, poor affairs compared with many which architects had put forward. The work of members of the Institute ought to be acknowledged in a Paper on this subject, but it had been too voluminous to refer to in detail.



9 CONDUIT STREET, LONDON, W., 23rd May 1914

CHRONICLE.

The “Exposition Anglo-Française d'Architecture, Ancienne et Moderne,” Paris, 1914.

The events in connection with the opening of the Exhibition in the Jeu de Paume building in the gardens of the Tuileries, passed off very successfully and with much éclat. On Friday afternoon, the 15th inst., the Exhibition was opened by M. Paul Jacquier, Sous-Secrétaire d'Etat des Beaux-Arts, and the members of the English Executive Committee in Paris,—viz., Messrs. Ernest Newton, A.R.A., Curtis Green, Gerald Horsley, etc., headed by Mr. Reginald Blomfield, R.A., the President of the Royal Institute, were presented to the Minister.

In the evening the annual banquet of the Société des Architectes diplômés par le Gouvernement was held in the rooms of the Palais d'Orsay. The function was presided over by M. Viviani, Ministre de l'Instruction Publique et des Beaux-Arts, and was attended by some 300 members and their friends, including several members of the Royal Institute and Architectural Association. Among the guests were the United States Ambassador to France, Mr. Herriek, and many distinguished French architects—viz., MM. Pascal, Laloux, Paulin, etc., and M. Jacques Hermant, President of the Société, supported the Minister. After dinner the President of the Société (M. Hermant) warmly welcomed the President of the Royal Institute and the English visitors, and toasted the success of the Exhibition, describing it as a further manifestation, of an interesting and delightful kind, of the “entente cordiale” between the two great nations.

At the close M. Viviani, in an admirable speech, presented Mr. Reginald Blomfield with the diploma signed by the Président du Conseil, Ministre de l'Instruction Publique et des Beaux-Arts, appointing him “Officier de l'Instruction Publique,” and Messrs. Ernest Newton, W. Curtis Green (President Architectural Association), Gerald C. Horsley and P. Cart de Lafontaine (Hon. Secretary Exhibition Committee) with diplomas appointing them “Officiers d'Académie.”

An attractive and interesting programme for the entertainment of the English visitors had been,

arranged by the Committee of the French Society, and this included visits to Versailles on the 16th, to the Salon on the 17th, and to Fontainebleau on the 18th. About 25 members of the Royal Institute were present, and four or five ladies were of the party. Every possible arrangement was made for the comfort of the visitors, and their reception by the President of the Société (M. J. Hermant) and other members of the Committee, notably MM. Defrasse, Godefroy, Lisch, Thoumy, Bérard, etc., was most cordial and kind. Mention must be made also of the very appreciative notices in the French press—notably in the *Liberté* and the *Figaro*—by M. Mora.

These interesting events were brought to an end on the afternoon of Tuesday, the 19th inst., when the Exhibition was visited by the President of the French Republic, M. Raymond Poincaré, accompanied by Madame Poincaré, and supported by M. Jacquier, etc., etc. The President examined the drawings with evident interest, and addressing Mr. Reginald Blomfield and the other members of the English Committee, expressed his pleasure and that of Madame Poincaré in very gracious terms at what they had seen.

It only remains to say that the Exhibition was admirably housed in the Salle du Jeu de Paume, and the drawings and photographs looked extremely well. The members of the Committee responsible for the hanging of the different works were Messrs. Atkinson, Horsley, Horsnell, Cart de Lafontaine, Geoffry Lucas, assisted by Prof. Bourdon of the Glasgow School of Architecture, and Mr. F. R. Yerbury, Secretary of the Architectural Association.

GERALD C. HORSLEY [F.].

The Revised Scale of Charges: An Abortive Meeting

The Adjourned Special General Meeting summoned for Monday the 11th May, for the consideration of the remaining clauses of the draft Revised Schedule of Charges, failed to draw sufficient members to enable the business to be proceeded with. By-law 67 requires the presence of at least 40 members, of whom at least 21 must be Fellows. At half-past eight, the limit of time fixed by By-law 65, 39 members only had assembled, consisting of 24 Fellows (including 6 members of the Council) and 15 Associates (including one member of the Council), and the Chairman, Mr. George Hubbard, F.S.A., *Vice-President*, having explained the situation, expressed his regret that the Meeting could not take place, and thereupon left the Chair.

At the General Meeting last Monday, Mr. Max Clarke [F.], after the Minutes of the previous Meeting had been signed, asked the Chairman if he should be in order in moving at that Meeting that the further consideration of the Scale of Charges be deferred till that day six months. He wished, he said, to call the attention of the Council to the complete indifference, as shown by the small attendance at the last meeting, not only of the General Body,

but of the Council themselves, with regard to this matter of the Revised Scale. It would be, he considered, most unfortunate if such an important matter as this alteration of the Scale of Professional Charges were left to the decision of perhaps a bare quorum out of the total number of over four thousand which made up the General Body.

The Chairman, Mr. H. V. Lanchester, *Vice-President*, in reply, said that the Council at their Meeting that afternoon had decided that the Revised Scale should be again brought forward for the consideration of the remaining clauses at a Meeting to be called for the 8th of June next.

The Licentiates and the Proposed New Charter.

The following letter, which under the provisions of Clause 1 of the Charter it was not permissible to read as desired at the Special General Meeting (Registration) on the 27th April last, is printed in the JOURNAL at the request of the signatories, Messrs. Houlton Wrench and Francis Winder, *Licentiates* :—

To the Secretary R.I.B.A.

DEAR SIR,—At a meeting of the Licentiates R.I.B.A. of the Sheffield district, held on April 22nd, the proposed terms of the suggested new Charter were considered.

Extreme disappointment was felt that it is proposed not to include Licentiates in the Chartered class.

Licentiates were not given to understand when they joined the Institute that a distinction of this nature would be made thereafter.

This meeting of Licentiates respectfully request the R.I.B.A. Council to reconsider this clause, and it is hoped that they will see their way to admit Licentiates as "Chartered Architects."

It is requested that this letter may be read at the Special General Meeting to be held on Monday next, April 27th, and an early reply thereto from the Council will be much appreciated.—We are, Sir,

Yours faithfully,

F. HOULTON WRENCH, Assoc.M.Inst.C.E.,
Chairman.

FRANCIS A. WINDER, F.S.I.,
Secretary.

London Society's Map of Open Spaces round London.

At the Housing and Town Planning Exhibition organised by the Victoria League at the Imperial Institute, 18th May to 21st, there was exhibited the Map of the Open Spaces around London which is being prepared by a special committee appointed by the London Society. The object of the map is to show the position with regard to open spaces in and around London in a manner which we believe has never hitherto been attempted. All commons, recreation grounds, parks, etc., that are definitely dedicated to the use of the public are shown, together with cemeteries, reservoir lands, allotments, low-lying grounds, sewage farms, etc., which are never likely to be built upon.

In addition to the above, areas in the hands of private clubs, such as golf courses, tennis, cricket and football grounds, etc., are given, coloured in lighter tints; and it is intended as soon as the information as to the present position has been collected to continue the work by preparing a comprehensive scheme of all the lands in the out-lying districts which ought to be preserved either because of their natural beauty, or because of their value for purposes of recreation, etc.

The members of this Committee have been making a personal appeal to their friends to help them with donations towards the preparation of this map. Its completion and reduction to a form in which it will be available for ready reference will entail considerable further expenditure, and if any members of the Institute interested in the movement would care to make a contribution towards this special object the Secretary of the London Society, 27 Abingdon Street, Westminster, S.W., will be very glad to communicate with them.

The Architect and the Selection of Measurer or Surveyor.

The following letter has been addressed from the Glasgow Institute of Architects to various Public Authorities in Scotland within the Institute's sphere of influence:—

SIR,—It has not uncommonly been the practice for Public Authorities when promoting a building scheme to make the appointment of a Measurer or Surveyor independently of, and in some cases prior to, that of the Architect.

The Practice Committee and the Council of the Glasgow Institute of Architects have had this procedure under consideration, and I am instructed to advise you that, in their experience, it is frequently productive of unsatisfactory results in the ultimate execution of the work.

The Architect being generally, and rightly, held responsible not only for the efficiency of the building but for the conformity of the ultimate cost with the original estimates, it is of the utmost importance that his advice should, in the first instance, be obtained in the selection of a Measurer, as only by this means can there be security that his plans and specifications will be adequately rendered in the Schedule of quantities issued to the builders as the basis of their tenders.

In like manner, the appointment of an architect as assessor in a Competition should, and generally does, carry with it the responsibility of an adequate recognition on his part of the question of cost in making his award. This being so, where the services of a Measurer are required, the selection of such should be left with the Architect, and his fee be recognised as part of the assessor's expenses, instead of, as is frequently the case, the appointment being made independently, and regarded as a preliminary to his preparing at a later stage the schedules of the selected design.

I have, on behalf of my Institute, to express the hope that the soundness of these propositions will be appreciated by your Council or Board, and that, if or when the opportunity offers, they will be given effect to.

In name and on behalf of the Glasgow Institute of Architects,
C. J. MACLEAN, Secretary.

An Artist in Charcoal on London as a Subject.

At the Annual Exhibition of the Architectural League of New York a masterly series of charcoal drawings of architectural subjects by Mr. Hopkinson Smith excited marked interest and admiration. The

ordinary processes of reproduction fail to do justice to work of this kind, but some idea of the quality of Mr. Smith's drawing may be gained from a couple of illustrations of Chartres Cathedral in the April number of the *Journal of the American Institute of Architects*. In a characteristic address on the use of his chosen medium, delivered before the Architectural League, Mr. Smith reveals himself to be as fine an artist in words as he is in drawing.

"Charcoal," said Mr. Smith, "is the unhampered, the free, the personal individual medium. No water, no oil, no palette, no squeezing of tubes, nor mixing of tints; no scraping, scumbling, or other dilatory and exasperating necessities. Just a piece of coal, the size of a small pocket-pencil, held flat between the thumb and the forefinger, a sheet of paper, and then 'let go.' Yes, one thing more—care must be taken to have this forefinger fastened to a sure, knowing, and fearless hand, worked by an arm which plays easily and loosely in a ball-socket set firmly near your backbone. To carry out the metaphor, the steam of your enthusiasm, kept in working order by the safety-valve of your experience, and regulated by the ball-governor of your art knowledge—such as composition, drawing, mass, light and shade—is then turned on.

"Now you can 'let go,' and in the fullest sense, or you will never arrive. My own experience has taught me that if an outdoor charcoal sketch, covering and containing all a man can see—and he should neither record nor explain anything more—is not completely finished in three hours, it can never be finished by the same man in three days or three years.

"For a drawing in charcoal is really a record of a man's temperament. It represents pre-eminently the personality of the individual, his buoyancy, his perfect health, the quickness of his gestures. All these are shown in the way he strikes his canvas—compelling it to talk back to him. So also does it record the man's timidity, his want of confidence in himself, his fear of spoiling what he has already done, forgetting that a nickel will buy him another sheet of paper.

"Courage, too, is a component part—not to be afraid to strike hard and fast, belabouring the canvas as a pugilist belabours an opponent, beating Nature into shape.

"As for the Putterers and the Nigglers, the men and women whose stroke goes no farther back than their knuckles, I may frankly say that charcoal is not for them. The blow is a sledge-blow going from the spinal column—not the pitti-pat of a jeweller's hammer elaborating the *repoussé* around a goblet.

"Remember, too, that the fight is all over in two hours—three at the outside—the battle really won or lost in the first ten minutes, if you only knew it, when you get in your first strokes, defining your composition and planting your big high light and your big dark. It is all right after that. You can taper off on the little lights and darks, saving your wind,

so to speak, sparring for your next supplementary light and dark.

"Remember, too, when the fight is over, not to thoroughly spoil what you have done by repetition or finish. Let it alone. You may not have covered everything you wanted to express, but, if you have smashed in the salient features, the details will look out at you when you least expect it. There are a thousand cross lights and untold mysteries in Rembrandt's shadows which his friends failed to see when his canvas left his studio. It is the unexpressed which is often most interesting. Meissonier tells his story to the end. So do Vibert, Rico, and the whole realistic school. Corot gives you a mass of foliage—no single leaf expressed, but beneath it lurk great cavernous shadows in which nymphs and satyrs play hide-and-seek.

"Remember, also, that just as the blunt end of a bit of charcoal is many many times larger than the point of an etching-needle, so are its resources for fine lines and minute dots and scratches just that much reduced. It is the flat of the piece of coal that is valuable—not its point.

"As to what *can* be done with this piece of coal, I can but say *everything*. That there are some subjects better than others, I will admit. For me, London, its streets and buildings, come first, especially if it be raining; and there is no question that it does rain once in a while, making the wet streets and sidewalks glisten under the white-grey sky—little rivulets of molten silver escaping everywhere. When with these you get a background—and I always do—of flat masses of quaint buildings, all detail lost in the haze and mist of smoke, your delight rises to enthusiasm. Nowhere else in the world are the 'values' so marvellously preserved. You start your foreground with, say, a figure or umbrella, or a cab expressed in a stroke of jet-black, and the perspective instantly fades into greys of steeple, dome, or roof, so delicate and vapoury that there is hardly a shade of difference between earth and sky; or you stroll into some old church or cathedral, as I did, last summer, when I found myself in that most wonderful of all English churches—and I speak deliberately—St. Bartholomew the Great, over in Smithfield.

"Other churches have I studied in my wanderings; many and various cathedrals, basilicas, and mosques have delighted me. I know the colour and the value of tapestry and rich hangings, of mosaics, porphyry, and verde antiques, of fluted alabaster, and the delicate tracery of the arabesque, but the velvety quality of London soot when applied to the rough surfaces of rudely chiseled stone, and the soft loveliness gained by grime and smoke, came to me as a revelation.

"This rich black which, like a tropical fungus, grows and spreads through its interior, hiding under its soft, caressing touch the rough angles and insistent edges of the Norman, is what the bloom is to the grape, what the dark purpling is to the plum, mellow-

ing to sight the brilliancy of the underskin. And there are wide coverings of it, too, in Bartholomew's, as if some master decorator had wielded a great coal, and at one sweep of his hand had rubbed its glorious black into every crevice, crack, and cranny of wall, column, and arch.

"Certain it is that no other medium than the one used could give any idea of its charm. Neither oil, water-colour, nor pastel will transmit it—no, nor the dry point or bitten plate. The soot of centuries, the fogs of countless Novembers, the smoke of a thousand firesides, were the pigments which the Master Painter set upon his palette, in the task of giving us one exquisitely beautiful interior wholly in black and white."

The New Delhi.

The drawings of the Indian Secretariats and Government House, forming the great block of capital buildings designed by Mr. Edwin Lutyens and Mr. Herbert Baker for the New Delhi, are now on view at the Royal Academy. *The Times* of the 4th inst. publishes the following from a correspondent:—

The drawings must not, we understand, be regarded as absolutely final. They are in the nature of warrant designs, which have served the purpose of formulating and crystallizing the general character and style of treatment. They may not satisfy the protagonists on either side in the long-drawn "battle of the styles," but they clearly represent a novel and splendid effort to apply, with due regard for Indian sentiment, the spirit and essence of the great traditions of architecture to the solution of structural problems conditioned upon an Indian climate and Indian surroundings and requirements. To use the language of the architects themselves, it has been their aim "to express, within the limit of the medium and of the powers of its users, the ideal and the fact of British rule in India, of which the New Delhi must ever be the monument."

The inspiration of these designs is manifestly Western, as is that of British rule, but they combine with it distinctive Indian features without doing violence to the principles of structural fitness and artistic unity. Many of the details which will be still more characteristically Indian cannot be displayed at the present stage, for the elaborate ornament and decoration, in which the Indian craftsman excels, can scarcely be shown on large-scale drawings intended mainly to illustrate the general conception of the buildings. Much will depend, moreover, upon the resourcefulness and ability of the Indian artificers themselves whom the Government of India proposes to bring together in Delhi to give expression, by their decorative work, to the best traditions of skilled Indian craftsmanship.

A few explanatory remarks as to the site which these buildings will occupy may help to a better appreciation of their value. To the south of the old Delhi of the Moghul Emperors a level plain extends between the Jumna river to the east and to the west the southern prolongation of the historic Ridge which was the scene of so many heroic struggles during the great Mutiny. About three miles to the south of the Delhi Gate and to the north of the road leading out to the Kutub Minar, there projects from the Ridge, and well above the level of the plain, a rocky outcrop known locally as the Raisina Hill. The irregular surface of this outcrop has now been levelled to serve as the site of the Secretariat buildings, which will contain all the chief offices of the Government of India, on either side of a great processional avenue leading up to Government House itself, which, as the residence of the representative of the King-Emperor, with its central Durbar Hall and the adjoining chamber for the Legislative Council of the Viceroy, will be the culminating point of the new city.

The approach to the Secretariat buildings from a spacious

plaza—the "Great Court"—lies up an inclined way with a rise of about 1 in 22, so that they will stand at their base some 30 feet above the surrounding country. The two blocks of which they are composed will measure about 460 feet in breadth and 1,170 in length, whilst "Government Court," between them, will be about 400 feet broad. The eastern ends facing the plain are marked by two lofty towers and deep loggias looking on to the central vista. Each block is crowned by a central dome rising, in the northern block, above a spacious entrance hall, and, in the southern block, above a conference hall, surrounded by a suite of official reception rooms. Beyond the Secretariat buildings "Government Court" passes into "Viceroy's Court," which is, in effect, a raised causeway about 600 feet in breadth and 1,300 feet in length, leading up to Government House, the portico of which will be raised some 20 feet, or about 50 feet in all, above the level of "King's Court." Government House itself centres in the great Durbar Hall, with a noble dome recalling the dome of the Pantheon in Rome, which dominates and governs the lay-out of all the surrounding buildings. Round this Durbar Hall are grouped the State rooms and great stairways from the entrance courts on the north and south side, with the private suites in the southern wing and the Legislative Council Chamber and offices for its members in the northern wing, to which a lateral avenue will afford a separate approach. In the rear of Government House there will be a raised garden, walled and terraced in the manner of Moghul gardens, whilst below it, on the level of the surrounding country, a park will be laid out, containing, in the immediate vicinity of Government House, staff houses and quarters with avenues leading, through open glades and woodland, up to the rough shrub and hill trees of the ridge above it and the military cantonments beyond.

Already the work of levelling and clearing and laying out new roads, on which some 20,000 coolies have been engaged throughout the last cold season, has progressed so far that from Raisina one can obtain an excellent survey of the whole lay-out of the new city, which will radiate from its base. To the west, at least of the Taj road, a considerable part of the area which the New Delhi will cover has never been built over in historic times, and the ancient monuments lying to the east of the Taj road are so grouped that it will be easy to enclose them in public parks and gardens, which promise to be among the most beautiful features of New Delhi. Even now there is no dearth of foliage in the old gardens of Delhi and along the old high roads, and those who can remember, some thirty years ago, the waste places outside the walls of Lahore or the desolate stretch of dust heaps and rubbish mounds between the Fort at Agra and the Taj where there are now green swards and leafy avenues, will have no difficulty in visualising the transformation scene which irrigation on the scale now contemplated will bring about in New Delhi. The view from Government House will range from the Moghul city and the gleaming domes and minarets of the Great Mosque, three miles away to the north, to the more distant Kuth and the scarped walls of Tughlukabad in the extreme south. Its front windows will face straight down upon the venerable battlements of Indrapat. The squalid village which had grown up inside the walls has been cleared away, and ultimately the waters of the Jumna, which bathes the southern ramparts, are to be in part diverted so as to surround it, as in olden times, with a broad sheet of water. A stately avenue, leading straight from the northern gate of Indrapat to the "King's Court," will form the chief processional approach to the new Indian Capitol. Thus, the new seat of British Imperial rule will be brought into direct connection with the India of past ages, for the walls of the Parana Kilat, built by a Moghul Emperor, cover the site but have not obliterated the name of Indraprastha, the city founded by the Pandavas after their epic struggle for supremacy in the earliest twilight of Indian history.

Some may regret that the site of the Great Durbar of 1911, which was originally contemplated for the new capital, should have proved impracticable, but those who have a sense of historic continuity will feel that, apart from all other con-

siderations of health, security, and general convenience, the site now adopted links up, as could no other, the India of the present and the future with the India of the past. The speeches made a few weeks ago by unofficial members of the Imperial Council from almost all parts of India in response to the Viceroy's statement as to the expenditure upon New Delhi show that Indian opinion, at least, is ready to respond generously to the great Imperial conception which two distinguished British architects are striving to embody in a shrine of stone and marble not unworthy of an Imperial city abounding in great memories and of an Empire that is unique in the world's annals.

The Nelson Column and Trafalgar Square.

The Times of last Thursday, referring to Mr. Raffles Davison's strictures upon Trafalgar Square, and his ideas for its beautification, agrees that, altered as he suggests, it would no doubt be a noble spot, but—it would not be Trafalgar Square. "The value of the 'show places' in a great and ancient city," *The Times* considers, "does not lie wholly in their artistic beauty. . . . The Nelson Column may be in form ridiculous, but its interest heavily outweighs its ugliness. It speaks with the voice of its own time; that was its period's notion of a hero's monument. It is instinct, it is vitalised, by the innumerable eyes and thoughts that have been turned upon it in the generations. If worthless when new, it has since then acquired merit, which has brought it nearer every year to deserving an immortality of repose. It may be ugly, but it is historic. It has a personality, a character. And we should do well always to bear in mind that taste is as changeable as spring weather. The day may come when the Nelson Column will be hailed by sculptors and architects as the finest extant work in English monumental art. We know now that the eighteenth century, that period of intense artistic vitality and consciousness, robbed us of priceless specimens of English domestic architecture. With the purest intention and with all the knowledge and taste at their disposal, certain ages have worked what we see at the present moment to be irreparable damage to our churches and cathedrals. But we do not yet seem to have grasped the law that governs all such cases—a law that not long ago was touched upon in our columns by Mr. Arthur Benson in connection with the doubtful case of the windows in Winchester College Chapel. Ideas of artistic beauty are fallible and changeable; the cumulative interest of history and of character is, by comparison, changeless and enduring. Except, therefore, where convenience compels it, no age should be permitted to alter or to destroy the work of its predecessors."

Derelict Condition of the Bath Colonnade.

The north side of Bath Street, Bath, famous for its Ionic colonnade, which a few years ago was saved from demolition at the hands of the builder, now threatens to fall into ruins, and those responsible received notice last Saturday that one of the houses must be pulled down or rebuilt at once. *The Times* of the 18th inst. says that since the public agitation to preserve the colonnade and the old houses defeated

the proposal to erect a large hotel on the site, nothing more apparently has been done. For a long time past a mortgage upon the property has been held by the London City and Midland Bank. The buildings were vacated when the hotel was projected, and the street has since been practically derelict. Now serious cracks have appeared in the upper part of No. 9, the house at the extreme west end of the street, and on Saturday night last the Bath Corporation had a considerable space in front of the building barricaded off. On the same day a notice, under the provisions of the Public Health Act, 1875, was served upon the mortgagees requiring them "to take steps within three days to begin to take down, rebuild, or otherwise secure" the house, it being "in a ruinous state, and dangerous to passengers or occupiers of neighbouring buildings."

Open Spaces about Dwelling-houses.

An interesting item in the Annual Report of the Sheffield Society of Architects has reference to the by-law dealing with open spaces in connection with domestic buildings. The Council stated that they submitted draft proposals for a revision of the by-law, and suggested that it should embody the following recommendations: "That the requirement with regard to open spaces at the rear or side of buildings should apply only to dwelling-houses used wholly or principally as places of residence by day and night; that when a dwelling-house is erected upon an upper story of a building the open space required by the by-laws shall be provided upon the level of such story; and that in all cases the distance across the open space shall be governed by the height of that portion of the building which immediately abuts upon this open space." These suggestions were possibly too much at variance with the Model By-laws of the Local Government Board, and the sub-committee of the City Council had not been able to recommend their adoption in their entirety. Until the matter was settled, the Council had resolved that the requirements should not be enforced in the case of buildings other than dwelling-houses, but the benefit of this could only be regarded as temporary, pending a satisfactory alteration of the actual by-law.

The Smoke Nuisance.

Sir Aston Webb, C.B., K.C.V.O., R.A. [F.], is serving on the Departmental Committee which has been appointed by the President of the Local Government Board "to consider the present state of the law with regard to the pollution of the air by smoke and other noxious vapours, and its administration, and to advise what steps are desirable and practicable with a view to diminishing the evils still arising from such pollution." Other members are Mr. Russell Rea, M.P., chairman; Mr. H. Brevitt (town clerk of Wolverhampton), Professor Z. B. Cohen (of Leeds University), Colonel H. Hughes, Mr. T. F. Maccabe (Inspector under the Local Government Board for

Ireland), Lord Newton, Captain H. R. Sankey, Mr. B. Duncomb Sells (general manager of the Machinery Users' Association), Mr. P. C. Simmons, L.C.C.; Mr. E. D. Simon (of Manchester), Bailie W. B. Smith (of Glasgow), Mr. H. O. Stutchbury (principal clerk to the Local Government Board), and Mr. Christopher Turner. The Secretary is Mr. E. A. Faunch, of the Local Government Board.

The Tribunal of Appeal.

The Lord Chancellor has approved of new regulations as to the procedure to be followed in cases of appeal to the Tribunal of Appeal constituted under the London Building Act 1894, the time and notice of appeal, and the fees to be paid (in substitution for the regulations of February 21st 1895). The regulations are now in force. Appeals have to be lodged within one month, or such other period as may be prescribed by particular Acts of Parliament. Appellants and others may appear in person or by counsel, solicitor, or agent. There is a hearing fee of £5 for cases not exceeding five hours in length, and it is provided that "in addition to the above hearing fee, an additional fee of £1 per hour shall be paid by the appellant for each hour or part of an hour occupied in the hearing over and above the first five hours."

Publishers' Announcements.

The third batch, just issued, of Mr. Batsford's charming series of "Fellowship Books" consists of the following six books: "Love," by Gilbert Cannan; "The Meaning of Life," by W. L. Courtney; "Nature," by W. H. Davies; "Trees," by Eleanor Farjeon; "Flowers," by J. Foord; "Poetry," by Arthur Quiller Couch.

The Oxford University Press has in preparation an authorised translation of Signor Rivoira's new book, *Architettura Musulmana sue Origini e Suo Sviluppo*. The translator, Mr. G. McN. Rushforth, has had the advantage of Signor Rivoira's revision. All the illustrations included in the Italian edition will appear in the translation.

Architects' Benevolent Society.

The Chelsea Arts Club have again this year made a donation of £50 to the Architects' Benevolent Society from the profits of the annual fancy dress ball given under the auspices of the club.

OBITUARY.

The late Mr. Thomas Holloway.

At the General Meeting last Monday the Hon. Secretary, Mr. E. Guy Dawber, after the announcement of the losses which the Institute had sustained by death since the previous Meeting, referred to the recent death of Mr. Thomas Holloway: "It would not be fitting," he said, "that at such a Meeting as this we should let pass without reference the great loss which the building industry has suffered by the

death of Mr. Thomas Holloway, the well-known builder. I am sure all of us who have had the pleasure of doing business with Mr. Holloway will bear testimony to his sterling qualities, to his absolute integrity and honesty, and to the kind way in which he has assisted and helped the members of our profession who have had the pleasure—and, I may say, the honour—of being associated with him in the course of their professional duties. (Hear, hear.) Mr. Holloway was well known and esteemed for his great business capacity, and he had the happy knack of making not only his clients, but also the architects who worked with him, his personal friends. I have to move that a message of sympathy and condolence be sent, on behalf of the members of the Institute, to the firm of which he was so distinguished a member, and also to his widow and family."

The resolution was carried, at the instance of the Chairman, by members rising in their places and passing the vote in silence.

Bernard William Hurt Brameld [*Fellow*, elected 1903], whose death was recently announced, was the eldest son of the Rev. G. W. Brameld, vicar of East Markham, and a direct descendant of the makers of Rockingham china. Educated at the Nottingham Grammar School, he subsequently became articled to the late Mr. F. H. Oldham, of Manchester. Shortly after the completion of his articles he entered the office of the City Surveyor of the Manchester Corporation, where he stayed for about sixteen years. Upon leaving the Town Hall he was successful in winning some competitive work, chief of which was the Gainsborough Town Hall and Market Buildings. Entering into private practice, he took into partnership Mr. J. Thorley Smith, and the firm thus constituted built up a varied and successful business. Several town buildings, private houses, and many hotels, the chief of which was the Trafford Park Hotel, were designed and built by them, together with public baths for the Corporation of Eccles, won in open competition. Mr. Brameld was also the patentee of a combined bath and lavatory, which was admirably suited to the limited space so frequently accorded to working-class dwelling-houses.

MINUTES. XIV.

At the Fourteenth General Meeting (Ordinary) of the Session 1913-14, held Monday, 18th May 1914, at 8 p.m.—Present: Mr. H. V. Lanchester, *Vice-President*, in the Chair, 26 Fellows (including 9 members of the Council), 29 Associates (including 1 member of the Council), 5 Licentiates, 2 Hon. Associates, and numerous visitors.—the Minutes of the Annual General Meeting held 4th May 1914, having been published in the *JOURNAL*, were taken as read and signed as correct.

Mr. Max Clarke [*F.*] referred to the Special General Meeting for the consideration of the Revised Scale of Charges summoned for the 11th May, which had fallen through for want of a quorum, and asked if he should be in order in moving that the further consideration of the matter be deferred till that day six months.

The Chairman, in reply, stated that the Council at their

Meeting that afternoon had decided that the subject should be again brought forward at the Meeting to be held on the 8th June.

The Hon. Secretary announced the decease of Richard Creed, *Fellow*, elected 1882, and Jonathan Tebbs Bottle, *Associate*, elected 1865.

The Hon. Secretary also announced the decease of Mr. Thomas Holloway, the eminent builder, and it was resolved that a message of sympathy and condolence be sent on behalf of the Institute to his widow and family, and also to the firm of Messrs. Holloway Brothers, building contractors, of which he was director.

The Secretary announced that the Council at their meeting of the 4th May, acting pursuant to By-law 12, had unanimously elected Mr. Arthur Davis to the Fellowship of the Royal Institute.

The Secretary also announced that Mr. John George Dunn, of Birmingham, had been reinstated as Associate of the Royal Institute.

The Secretary further announced that the following gentlemen had been nominated by the Council as candidates for membership of the Royal Institute:—As FELLOWS (14): Guy Church [*A.* 1903]; Thomas Oliphant Foster [*A.* 1913], Simla, India; Walter Robert Jaggard [*A.* 1895]; John Kirkland [*A.* 1899]; John Archibald Lucas, *F.S.I.* [*A.* 1906], Exeter; Henry Seton Morris [*A.* 1909], Rangoon, Burma; George Penrose Kennedy Young [*A.* 1885], Perth; together with the following Licentiates, who have passed the Examination qualifying for candidature as Fellows: Herbert Tudor Backland, Birmingham; George Felix Neville Clay, *B.A.* Cantab.; Basil Charlton Deacon, Luton, Bedfordshire; John Henry Beart Foss; James Mitchell White Halley; Edward Haywood-Farmer, Birmingham; Roland Walter Lines, Edmonton, Alberta, Canada. As ASSOCIATES (14): James Gough Cooper [*S.* 1907], Bolton; Harold Lea Fetherstonhaugh [*Special*], Montreal; Philip Capes Harris [*S.* 1910]; George Ernest Hedley [*S.* 1909], Toronto; George Howard Jones [*S.* 1905]; Geoffrey Morland [*S.* 1904], Bromsgrove; James Cecil McDougall, *B.Sc.*, *B.Arch.* [*Colonial*], Montreal; Arthur Nyton Peckham [*S.* 1907], Simla; Percy Willmer Pocock, Jun. [*S.* 1909]; Wilfred Craven Rhodes [*Colonial*], Toronto; Stanislaus Roarty [*Colonial*], Sydney; Theodore Gilbert Scott [*S.* 1910], Norwich; Edwin Smith, *P.A.S.I.* [*S.* 1907], Neath, S. Wales; William Symmonds [*Colonial*], Montreal. As HON. ASSOCIATE: Sir William Wyndham Portal, Bart., *M.A.* Oxon., *F.S.A.*, *D.L.*, *J.P.* As HON. CORRESPONDING MEMBERS (2): Jules A. E. Brunfaut, Brussels; Ralph Adams Cram, *Litt.D.*, *F.A.I.A.*, *F.R.G.S.*, Boston, Mass.

Mr. William Wallace Friskin, *Associate*, and Frederick Candy Uren, *Licentiate*, attending for the first time since their election were formally admitted by the Chairman.

Mr. T. Raffles Davison [*Hon. A.*] having read a Paper entitled "BEAUTIFUL LONDON," and illustrated it by means of lantern slides, a discussion ensued, and on the motion of Mr. Carmichael Thomas, Chairman of the Executive Committee of the London Society, seconded by Mr. Granville Smith, Mayor of Westminster, a vote of thanks was passed to Mr. Davison by acclamation.

The proceedings closed and the Meeting separated at 10.20 p.m.

COMPETITIONS.

Hythe Concert Hall Competition.

Members and Licentiates of the Royal Institute of British Architects must not take part in the above competition, because the conditions are not in accordance with the published regulations of the Royal Institute for Architectural Competitions.

By order of the Council.

IAN MACALISTER, *Secretary*.

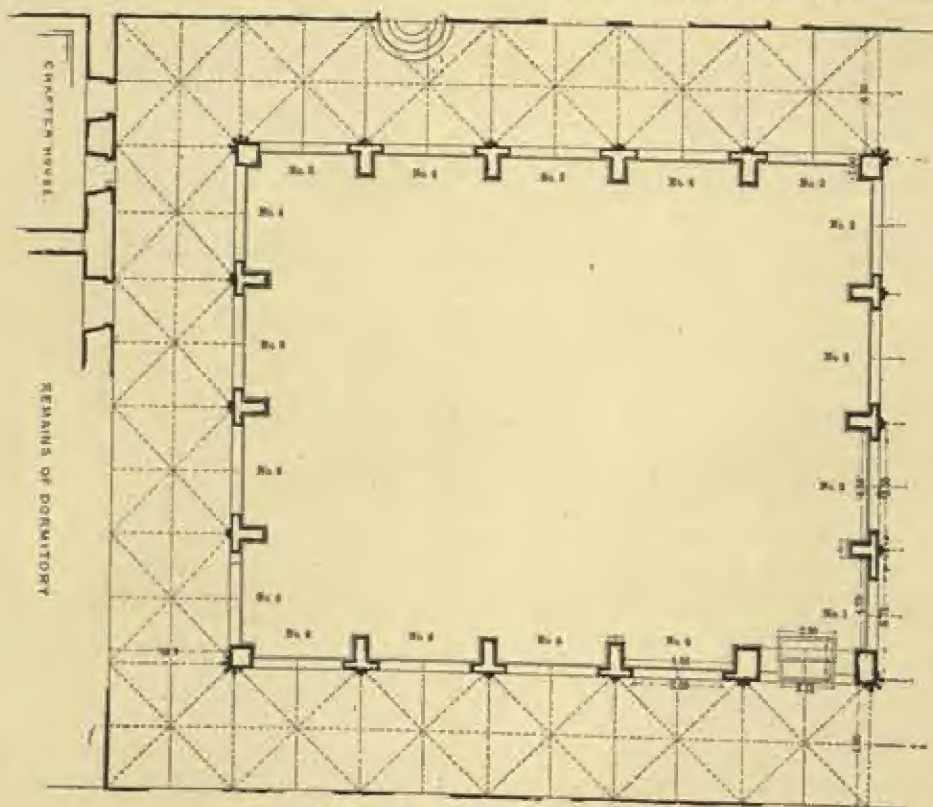
THE CLOISTER OF BELLA PAISE ABBEY, CYPRUS, 1913.

By GEORGE JEFFERY, F.S.A.,
Government Curator of Ancient Monuments, Cyprus.

THE magnificent ruins of the Premonstratensian Abbey of Bella Paise, or De la Paix, in Cyprus, have been described by many travellers in the past three centuries, and within the last fifty years by the architectural students, l'Anson and Vacher (*R.I.B.A. TRANSACTIONS*, 1883), Camille Enlart (*Art Gothique en Chypre*, 1899), and F. Sesselburg (*Short Monograph*, 1901). Of these descriptions the most important is M. Camille Enlart's, and as far as the history of the monument is concerned there is little to add to his excellent *résumé*.*

The most ancient part of the building is the church, which we hope to refer to on a future occasion.

The ruins of the Abbey, as they stand at the present day, consist of (1) the Church, still used by the orthodox villagers as their parish church, in a sound state of preservation, with the exception of its western porch, or narthex, and not very much injured by its conversion to a religious use for which it was not intended; (2) the Cloister, which although very much ruined is not beyond a restoration on paper such as is attempted in the accompanying illustrations; (3)



Plan of Cloister: Scale about 25 feet to 1 inch.

The Premonstratensian, or Norbertine branch of the Augustinian Order, was founded in the diocese of Laon in 1120; the name being derived from a place pointed out in a vision or dream of S. Norbert, which he therefore termed the *Pré Montré* or *Pratum Monstratum*. The Premonstratensian Abbey of Cyprus, which also takes its name from a place, was founded by Thierry, Archbishop of Nicosia, in 1232, under a brief of Gregory IX. (Cart. S. Sophia No. XXXVI. Pap., briefs Rieti, 9, 4, 1232).

the Refectory, a singularly well-preserved monument; and (4) the remains of the Dormitory, Chapter House, and Commons. One-half of the conventual buildings, comprising the usual abbot's house, guest house, &c., must have been swept away centuries ago, and the neighbouring village doubtless has been built from the now missing portions. A gateway shown in photo No. 1 is probably the entrance to the abbot's house, or guest house, from the *parris* in front of the church. Its marble lintel, which had been knocked

* General Plans of the Abbey will be found in the *R.I.B.A. TRANSACTIONS*, May, 1883.



Entrance to Guest House and Cloister.

away to allow the passage of camels with loads of stones on their humps, has been restored with gypsum. A terrible disaster occurred to the ruins in 1911, when the eastern side, or wall, of the dormitory fell down to within about 15 feet of the ground. The complete ruin of this portion of the premises was possibly intentional on the part of the stone robbers, who had knocked out the stone from the lower stage of all the buttresses on the east side of the dormitory for the purpose of destroying their support. The remains of the lower part of this wall have been secured, and partly rebuilt to form an enclosure during the recent repair of the ruins.

For possibly more than three centuries the ruins have been used as a quarry by the neighbouring villagers, and the cloister and sites of portions removed were turned into vegetable gardens planted with orange trees. This usage entailed the introduction of an immense quantity of earth, transported in donkey loads, and the deviation of a water-course into the precincts for irrigation purposes with obviously disastrous consequences.

During the past year (1913) I have been entrusted by the Government of Cyprus with the task of attempting some little repair and prevention of further decay in these most interesting ruins. In commencing the work, my desire was to avoid anything at all approaching "restoration"—this may, of course, be taken as granted—and I trust that my work will pass the most critical examination in this respect. My operations have been confined to (1) building two great buttresses against the west wall of the refectory, taking the place of the demolished buildings on that side; (2) removing the vegetable growth of centuries, tree roots, &c., from the roof of the refectory, and repairing and recovering the immense vault with

cement; (3) removing many hundred cartloads of earth from the precincts, and draining the ruined area; (4) uncovering the buried ruins of the Chapter House; (5) providing supports for the cloister arcades.

In building the two buttresses and securing the west wall of the refectory, a surprising discovery of the way in which such a structure can exist for centuries in a state of jeopardy was made. The whole of this immense wall, about 40 feet long, about 60 feet high, and averaging about 4 feet thick, stood practically on a mere earth foundation, without footings, and depending for its stability on the north and south walls at its ends. The mass was about 6 inches out of the perpendicular, which only adds to the marvel of its preservation under the circumstances. In addition to the two buttresses, which replace the missing support of the buildings on this side of the abbey, removed some centuries ago, this wall has been carried down to the rock surface, 8 feet below the earth level of the crypt floor, in strong Portland cement concrete. This somewhat hazardous operation, carried out in small sections and with the greatest care, has proved a success in spite of the phenomenal nature of the site which on the north is bounded by a sheer cliff over a hundred feet high.

Until the present year the vaulting of the refectory seems from time immemorial to have been in the condition of a sieve. The rain penetrated at every part, and the mass of earth which had been placed on its outside to stop the leaks not only endangered the structure by its weight but also stopped up all the water channels. The earth has all been cleared away, with roots of trees and masses of vegetation, and the preservation of this remarkable vault has been



Cloister and Site of Guest House.



Roof of Refectory with New Cement Covering.

secured with a thin layer of Portland cement concrete. The mediæval buildings of Cyprus when vaulted in the European manner were never covered with rainproof roofs as in Europe. The vaults were covered on their outsides with "terrazzo," or concrete of small stones, puzzolana, and lime, in the same way as the small Byzantine churches of the natives. This economy in roofing accounts for the total disappearance of the greater number of the mediæval monuments of Cyprus, many of which seem to have been of magnificent proportions and of exceptional interest. To this must be added the fact that although the construction of these edifices was evidently superintended



Remains of the Chapter House.

by European masons, or "architects," the workmanship betrays the very great inferiority of the Byzantine builders employed under such supervision. Bella Paise Abbey is not an exception in this respect. The general structure of the refectory, with the exception of the west wall and vaulting, being in a very satisfactory condition, has not been touched.

In removing the *débris* of the ruined dormitory and Chapter House, the central column of the latter, with the seats for the monks, came to light. The column, its capital, and the first two springing stones for the central vaulting ribs were found under the earth in the position in which they had fallen. The column and its capital, a rather unusual attempt to imitate a "Corinthian" design by a mediæval artist, are of white marble. Above the capital is a curious cornice with crockets, early fourteenth century in style.



Ruins of the Cloister.

The cloister, the subject of the accompanying illustrations, has been repaired to the extent of rebuilding three shallow buttresses against its western side, which had been torn away by the stone robbers of long ago. This rebuilding was imperative in order to secure the stability of the four arches between them, which stood by themselves (the walk of this side of the cloister having been destroyed) and appeared in a somewhat precarious condition.

The tracery of all the eighteen arches of the cloister has been torn out by the stone robbers in a ruthless manner, but enough of the fragments, and the starting of the tracery curves, remain to allow of a reconstruction of the design. It will be noticed in the accompanying plan of the cloister that the design of the tracery is repeated in a very irregular manner around the enclosure. I presume the western side of the



No. 1.
Arch still filled with Tracery.

buildings to be somewhat older in date, and the designs Nos. 1, 2 and 3 have a more geometrical character than Nos. 4 and 5, which are evidently by a "flamboyant" hand. The east and north sides I attribute to the latest part of the building and to a very poor style of workmanship, in which the fourteenth-century style of mouldings and stone-cutting is combined with a coarse geometrical design, in a way characteristic of even a much later period of Cypriote art. The design of No. 3 bay is almost identical with No. 2.

Although the vaulting of the cloister is homogeneous with that of the surrounding walls on the north and east sides, the general style of the cloister is suggestive of a much later date. On the south side of the cloister the earlier building of the church has been cut into and slightly altered by the erection of the later additions, and the windows of the north aisle of the church, which were designed without reference to the later development of the Abbey, are now blocked up.

The photos showing the progress of my repairing work will sufficiently explain the extent to which I have been able to clean up the internal area of the cloister and lay bare the buttresses and cills of the openings. In so doing I discovered that



Detail of Mouldings to Tracery and Vaulting. Scale, 3 inches to 1 foot.



Nos. 2 and 3.



No. 4.



No. 5.

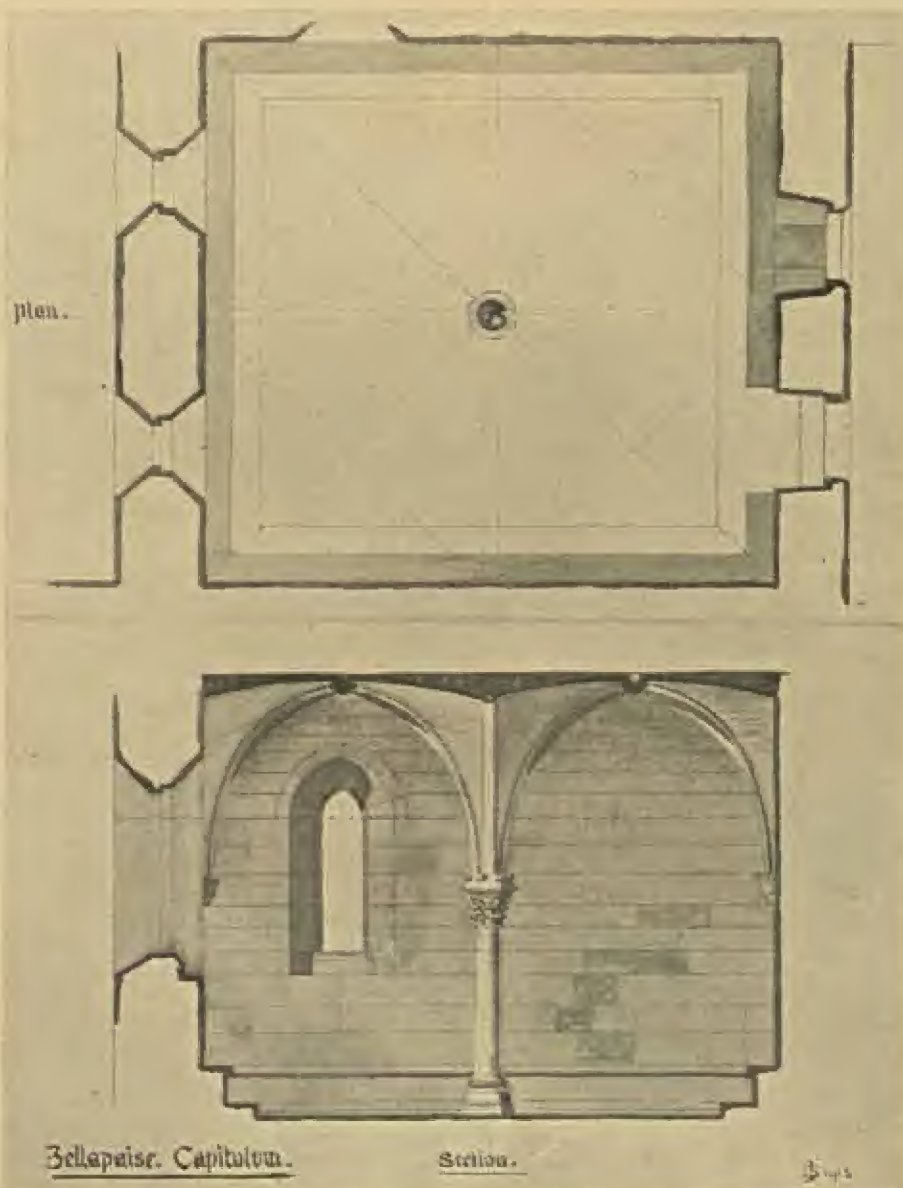


No. 6.

Diagrams of the Tracery from Pencil Studies on the spot. The numbers correspond to the numbers on the Plan.

a kind of stone balustrade had originally occupied the lower portion of the openings, but there was no trace of any part of its design. It very possibly resembled the pierced parapets of Famagusta Cathedral.

the famous "Tomb of Venus" formerly outside the Cathedral of Famagusta, and now decorating an Englishman's grave at Varosha. Both sarcophagi are probably by the same hand and were found in the necropolis of the Cyprian Salamis.



Plan and Section of the Chapter House, from Pencil Sketches on the spot: Scale, $\frac{1}{4}$ inch to 1 foot.

The curious arrangement of two ancient sarcophagi at the north-west corner of the cloister, placed one above the other so as to form a *lavabo* at the main entrance of the refectory, now shows to great advantage since the removal of the earth which buried its base. The richly carved Roman sarcophagus which does duty for a cistern, whence a row of little taps conducted the water into the marble tank of the *lavabo* below, is precisely similar in design and execution to

There still remains some little more to be done in the way of repair to this cloister. During the coming winter I propose to cover over the vaulting, after thorough repair, with the same cement concrete as has proved successful in the case of the refectory roof. A careful eradication of all vegetation from stone joints and gutters will also be effected, and the stability of the monument for future ages will, it is hoped, be secured without disturbing the charm which

all ruined buildings owe to the evidences of old age and Nature's gentle decay. M. Enlart, in his great book on the architecture of Cyprus, has not given a very exhaustive account of this most interesting monument. He does not seem to have noticed the evidences of a true Flamboyant character in the window tracery; he merely says, "des profils montent déjà la décadence de l'art quoique le tracé des remplages soit encore dans le style simple du commencement du XIV^e siècle."

The characteristics of the French Flamboyant style are rare in Cypriote work. As M. Enlart points out in another part of his work, the Spanish influences in the island during the fifteenth century were remarkable, owing perhaps to the presence of more than one princess of the house of Arragon on the Lusignan throne. The general effect of the work at Bella Paise is very reminiscent of Spain, and much more suggestive of Barcelona or Toledo than of Burgundy and Champagne as M. Enlart would make out.

Such a work of art as the Bella Paise cloister is absolutely unique in the Levant at the present day. At one time Cyprus possessed many examples on a far larger scale of such buildings, but they have all passed away leaving no trace. The half royal palace, half convent, of S. Dominic at Nicosia must have been a magnificent monument of Gothic art, but literally not one stone of it survives.

Of the Flamboyant style in Cyprus exceedingly few examples can be cited, and those few are not characterised by the familiar flowing tracery. The only instance of a Flamboyant window surviving to the present day is the large four-light example formerly in the old Konak or Government House of Nicosia, which is now preserved, after the demolition of the palace in 1905, amongst the mediaeval relics belonging to the English Government.

The church of S. Catherine, Nicosia (see R.I.B.A.

JOURNAL, 28th July 1906) is a beautiful example of the Cypriote fifteenth century, or later, style; but its Flamboyant character is confined to its richly carved doorways; its windows are of an early geometrical character. The large undulating leafage of the sculpture, and the elaboration of the mouldings, stamp the mason craft in a manner which shows that the fashion of the period was being closely imitated from European models, although there appears a singular absence of one or two important characteristics. In the same way the cloister windows at Bella Paise show an ambition to imitate the later fashion in tracery in examples Nos. 4 and 5, whilst the earlier geometrical designs survive alongside in the rest of the openings. In other words, it is easy enough to see that the design and workmanship of this cloister is only an attempt in the flowing Flamboyant of France and Spain, a style which never really took root in the Levant, and of which there is only this unique example now surviving in Cyprus.

The French *salle capitulaire* or Chapter House seems to have usually been square on plan (see Viollet-le-Duc, and Villard de Honnecourt's *Album*), and not of that detached character which was usual in England. At Bella Paise its position underneath the Dormitory is, perhaps, somewhat unusual. Villard de Honnecourt's plan for a Chapter House is almost identical with the example in Cyprus.

Note on the General Plan.—It should be observed that the Abbey is built on the spur or side of a hill, which on the north side of the buildings forms a cliff about 100 feet high. On the south side towards the hill an artificial moat or dry fosse was doubtless cut in such a way as to prevent any access to the Abbey except across the drawbridge under its machicolated gateway. This dry fosse has subsequently been filled up, and only traces of it remain at its west end.



Bella Paise Abbey, from a drawing by
Mr. Sydney Vacher.



Later Temple of Diana at Ephesus; Circular Carved Column Drum in the British Museum.



The "Lemnian" Athena (from Fürstwangler).

SOME ASPECTS OF GREEK ARCHITECTURE.

By THEODORE FYFE [F.]

Read before the Manchester Society of Architects, 10th December 1913.

OUR outlook on Greek architecture is very different to-day from what it was fifteen years ago. Both the evidences and the origins of Hellenism have been studied and brought to light in this short space of years to an extent which was not possible previously. Greek art and culture are seen to have penetrated the East, the South, and the North, to boundaries far removed from their centre—Easterly, indeed, as far as Japan, in all probability. The debt of Roman work to Hellenistic art had been surmised earlier, but Strzygowski has eloquently defended his claim that Byzantine art is practically derived from the Hellenic building of the Eastern Provinces of the Roman Empire. In origins, the discoveries in Crete have opened up an entirely new field of vision. It is not now contested that the finest results of the spade at Mycenæ and Tiryns are not, in fact, pure Cretan work. Instead of a dim knowledge of early "Pelagic" builders, dying out in an unknown period before the great Greek time, we have a new knowledge of a Mediterranean output, reaching arms to Philistia, Egypt, and Babylonia, pouring a continuous stream of culture into the more undeveloped mainland of Europe; of a great art of fresco painting with daring innovations which puts even Pompeii into the background; of a polychrome style of rich and complicated palatial and domestic building; of curious and skilful craftsmanship in many rare and precious materials. All this has increased the body of our knowledge and has greatly assisted our understanding of Greek art proper. That art in all its phases is seen to be something which permeated the simplest things of life. The architectural effects are seen to be built up of fine craftsmanship as well as fluted columns and entablatures. All the most perfect things of the Classic period, both in museums and actual buildings, are acknowledged to be Greek. It does not matter what is instanced—bronze pots, utensils and tripods, marble statuary, tables, garden seats and sarcophagi, terra-cotta ornaments and figurines, the strange delicacy of some far-off Syrian moulding—all are inseparably part of the great output, and rightly colour our conception of the accessories of pure architecture.

My own study of Greek architecture has brought home two aspects of it with outstanding vividness: first, the character and significance of the great Asian temples; and, second, the effect of

the interior of the finest type of Doric structure, exemplified in the Parthenon and the Temple of Zeus at Olympia. In considering such widely apart things as the culmination of temple building under Pericles and the temples of Asia Minor, we are brought face to face with the contrasts of the Greek genius. The luxuriance, the Eastern pomp, the sense of mere bigness, and the thoroughly Ionian character of the Asian temples, though it is *Hellenic*, is not so in the *Attic* sense. A glance at the map will help to explain this contrast in the geographical aspect. The vast plain of the Mæander, which runs inland from the coast line south of Ephesus, sets the key-note of what we are about to discover in the character of Asian work. Round about this plain, or in comparative proximity to it, are the sites of Ephesus, Sardis, Priene, Miletus, and Aphrodisias, each giving its name to a great temple in the Ionian style. Halicarnassus is farther south, and Xanthus still farther south, near the coast of Lycia. These cities are for the most part remarkably picturesque. Priene, perched high up, and overlooking the plain of the Mæander in its length, is wonderful; the curious conformation of hills round the site of Sardis gives it great nobility. Sardis, indeed, was one of the finest of these sites—standing in lonely splendour to-day, but once a centre of high civilisation, business and wealth, on the "Royal road" of Herodotus, from which branched other roads to Ephesus, Cyzicus, and Smyrna.

With the exception of Samos, the temple at Miletus was the largest in the Greek world, and Ephesus comes next. Nothing remains standing at Ephesus, but the whole conception becomes marvellously vivid after studying the British Museum fragments. For actual columns *in situ* we must go to the Temple of Cybele at Sardis, next in size to Ephesus. Until very recently the columns there were nearly half buried. The recent wonderful discoveries of the American Exploration Society quite confirm Cockerell's enthusiasm for the capitals, and show that the whole temple must have been of great magnificence. The bases of the great temple of Apollo Didymæus at Miletus* were very curious and beautiful. From the smaller temple at Priene, which can be well studied in Wiegand and Schrader's fine book, the friezeless character of the Asian temples was first clearly proved. The Lycian tombs, the tomb at Mylasa, the Nereid Monument, and the culmination of all of them—the Mausoleum at Halicarnassus—show what was accomplished in what may be termed the "sarcophagus" or "casket" type of building in Asia Minor. The Mausoleum was undoubtedly one of the finest monuments which has ever been erected in the world, and may fitly be compared with the Taj Mahal at Agra. Its sculpture reaches high-water mark. In many respects it is the most "Attic" of Asian buildings, but all these structures exhibit Asian characteristics in greater or less degree.

Professor Lethaby, in his admirable booklets, has called attention to the great opportunities we have for study here, in England, from the noble collection of Greek architectural fragments in the British Museum. We have practically all that exists of the two temples at Ephesus, the Mausoleum, and the entire Nereid Monument. The other strictly architectural fragments in the Museum are not so representative, yet there is a whole column and caryatid, as well as some carved mouldings and cofferings from the Erechtheum, capitals from the Parthenon, Propylæa, Temple of Nike Apteros, and Bassæ; some very fine fragments of caps from Priene, and several other fragments from Asia Minor and Cyprus. I want to try and show where some of these fragments find their place.

In considering the great Asian temples, we are at the very outset brought face to face with one outstanding characteristic—their size. Size or scale has what one might define as an absolute as well as a relative significance in architecture. Taking buildings in the mass we realise that St. Peter's at Rome is large in a different way from St. Paul's, London. To a much greater degree is Amiens Cathedral large in a different way from the Farnese Palace. But there is a more intimate significance of scale. The difference in size between the Diana Temple at Ephesus and the Nike Apteros Temple at Athens becomes at once a matter of subtle and absorbing interest to the architect. Both are pedi-

* See Prof. Rouanquet's interesting Paper published in the *Proceedings of the Classical Association of Ireland* last year.

mented temples of the Ionic order, and thus have a similar stylistic expression, an expression which has marked and insistent characteristics. Within the limits of that expression there is considerable variation in form and detail, and an immense difference in scale. To take a rough-and-ready illustration, if we were to represent the area of the front of the Athenian example by an octavo volume, the area of the front of the Asian example would, in comparison, require to be represented by an ordinary four-panelled door.

I have chosen the Nike temple for comparison, because it is one of the smallest examples of the Order known to us, and the reeded torus member in its base resembles that of the Asian temple. What interests us in the comparison is the way the purpose and detail of the design of each structure is carried out. Both are very fine examples of their class, and both have a decided similarity in their bigness of execution.

The Temple of Diana at Ephesus, to which I wish to draw attention in some detail, was the second, if not the third, of the temples built on that site. The earlier (called the Sixth Century, or "Cræsus" Temple), of which there are considerable fragments in the British Museum, is vastly interesting not only for itself, but in comparison with the later structure. The material of this temple has been fully published for the Museum by Mr. D. G. Hogarth, who had for his architect Mr. A. E. Henderson. The second or "Fourth Century" Temple was built on the foundation of the earlier one, and was practically identical with it in size. The base of the great platform of steps on which the temple rested is about 421 feet long by 240 feet wide. The actual columnar structure, which rose from a stylobate of three steps above the platform, was 345 feet long and 164 feet wide. The flanks show twenty columns and the fronts eight. As the temple was what is styled "Dipteral," i.e., with a double peristyle or row of columns round the central cella, this cella is, over its walls, only half the width of the front. The general impression must, therefore, have been a forest of columns, with the usual gable or pediment at each end and a sloping roof.

The total height from the base of the platform to the top of the pediment must have been about 100 feet or rather under. We can compare the dimensions of the front to Smirke's south portico of the British Museum, which is also an octastyle Ionic portico, and, so far as I am aware, the largest in this country. It is about 111 feet across the columns, and about 80 feet from the ground to the top of the pediment. The height of the columns is 45 feet, while those at Ephesus were over 55 feet, a difference of nearly one-fifth. Comparing the Ephesus Temple with the west front of St. Paul's, we find that it would stretch nearly across the width of the latter, and the top of the pediment (if one excludes platforms in both cases) would nearly reach the top of the crowning entablature in St. Paul's. These figures give us some idea of the greatness of scale of the Diana Temple.

The details were worthy of the occasion, and they can be studied with full comprehension of their magnificence at the British Museum. Let us concentrate our attention at first on the columns, as being the most important features in a Greek colonnaded temple. The capitals at Ephesus are the biggest things of their kind known to us in ancient art—that is to say, apart from their actual size, they are executed with a boldness and a grandeur which is quite unique. We do not see here the exquisite perfection and geometrical precision of parts which characterise the finest Athenian examples, but rather a treatment of the entire cap as living sculpture. The volutes are simple in design, but boldly chiselled and well formed. The cushion of the volutes rests finely on the immense "eggs" at the top of the shaft, while the treatment of the ends of the volutes is probably unique and certainly most original and fine. These caps are 8 feet 7 inches wide, and instinct with nobility. They have delicacies and graces which doubtless varied considerably in different examples, but they have the largeness of scale we should most desire when we consider the height at which they were raised above their base.

The bases of the columns are also remarkably fine things—and here I must digress somewhat on Asian and Athenian bases in general.

The Athenian Ionic column base, as is well known, usually, though by no means invariably,

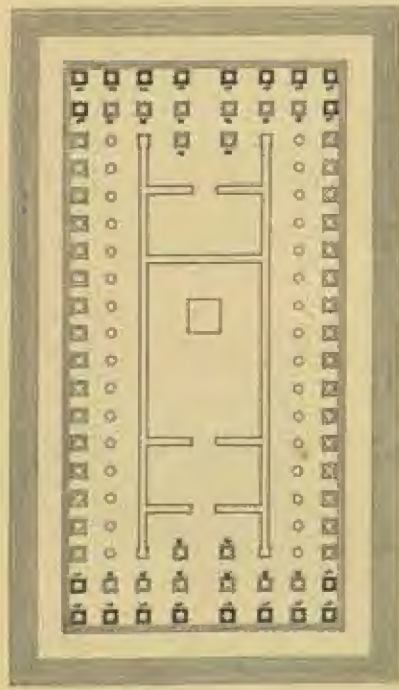
approximates to the so-called "Attic" type—that is, the lowest member is a torus. It is this lowest torus that we principally remark. It is obviously wanted, as there is no square plinth block to the base. In the large Asian temples, on the other hand, square plinth blocks are the rule. Above that is a circular drum shaped into a double cavetto, and on this sits the base proper of the column, a large reeded torus. The resultant effect is one of extraordinary lightness, delicacy, and strength, the first-named quality being very desirable in such a large member (the lowest drums of the columns at Ephesus are 6 feet in diameter), and admirably secured by the peculiar section given to the general line of the torus. I have dwelt so long on this matter of the base, as it is a feature most highly characteristic of the Asian Order and one which I submit is most completely successful for large work.

All the finest Ionic bases, whether Attic or Asian, give one the idea of a drum on which the column sits. This idea is thoroughly realised at Ephesus. No ordinary Attic base of that size would be so successful, and I venture to think there is a limit to which the Nike type of base should be applied. As regards the Attic base, we have a modern example of quite adequate size to judge by, in the old south front of the British Museum, already cited. The bases there are quite well done in their way, but they tend to make the columns look like magnified small ones, and are not completely successful for such a large Order.

But if the temple at Ephesus had had only these fine simple bases of familiar type, it would not have reached so high in estimation as it did in the past, and as it now does. Its 36 sculptured bases, mentioned by Pliny, were its most remarkable characteristic.

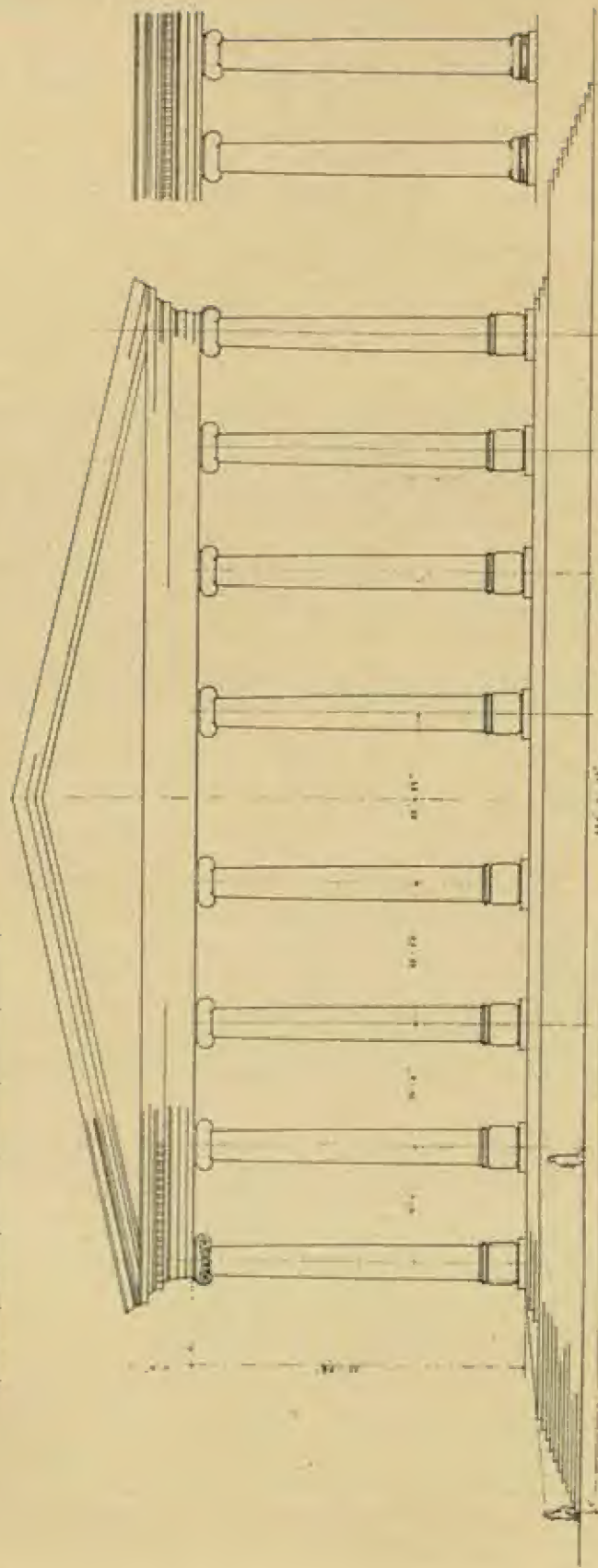
You must picture to yourselves the double row of columns at the fronts and the two columns at each porch, of similar height to the ordinary columns and with similar caps and plinth blocks, but having above the plinth block a square or circular sculptured base about 6 feet 6 inches high. The character of these truly magnificent bases can be fully judged from the Museum. They are covered with sculpture of the highest order—the square ones in high relief, and the round ones in low relief—which would render them, singly, worthy of the greatest note; in fact it is difficult to conceive a more beautiful column than one of these front columns of the temple. We can imagine it in its entirety: above the sculpture (which is nearest the eye and full of beauty of detail) rise the flutings of the great shaft, and this shaft in its turn is crowned by the sculptural caps we have already considered. Looked at in the mass the effect must have been superb. The difference in the intercolumniation of the fronts gave a light and varied spacing to the sculptured columns which effectually prevented monotony. Imagination can go a step farther and picture the great entablature, 9 feet high and 5 feet in projection, soaring over the front, and above that the triangle of the pediment. Flanking all this, and bodying it in, the serried ranks of columns of the temple sides.

The entablature, like the capitals, was also treated as one great member. It was, of course, governed by horizontal lines, but not to such an extent as in Attic examples. In essentials it consisted of an architrave of three fascias, which carried boldly projecting dentil blocks, which in turn carried the cornice. The architrave was nearly 4 feet high, and the total height of 11 feet, including the cymatium, offered of course a greater surface to the eye from below, owing to the bold projection of the cornice. There was an ovolo under the dentils, and a great egg-and-tongue course over them, of similar scale to the eggs of the capitals. All this is pretty clear from Priene, and from the Mausoleum, as well as from the actual fragments found. The cymatium was large and flat, boldly decorated with scrollwork in relief and with lions' heads at intervals of about 6 feet possibly. It was returned along the sides of the temple as well as on the raking pediment. The medal of Gordianus II. shows an unmistakable suggestion of dentil blocks under the raking cornice, and so does Hadrian's medal, though less clearly. It is possible that this may be medallist's licence. As every dimension helps to give you an idea of the scale, I may mention that the cymatium was about 2 feet in height, and the dentil blocks about 14 inches in height and projection. The bed of the corona was also about 2 feet.



Plan of Temple.

R = Round carved base.
S = Square carved base.



Ordinary Columna-
tion of Side.

Sketch Elevation of Front.

THE FOURTH CENTURY TEMPLE OF DIANA AT EPHESUS, AS RESTORED BY PROFESSOR LETHBRIDGE.

There is a splendid bigness about all the details of this temple, as well as a triumphant and masterful originality in their conception, that renders it different from every other monument of antiquity. It truly stands alone.

Considered in detail, the entablature without a frieze, or, as it is called by Choisy, "the Architrave Order," can be best studied in the Museum from the fragments of the Mausoleum, though these have been differently put together in the restoration there. The analogy of Priene, and the actual pieces found, justify the restoration proposed by Professor Lethaby, and illustrated in the *Architectural Association Sketch Book* for 1910. The dentil blocks, in this style of entablature, of course took the place of the frieze. They are the actual translation into stone of the ends of the wooden cross beams which rested on the architrave in an earlier wooden construction. In Attic work, where, as Mr. Spiers has truly remarked, we get that strange blending of Doric and Ionic detail which makes it unique, both frieze and dentil course are sometimes found with the Ionic Order, as at Eleusis, but the latter has become a mere decorative appendage. In the caryatid portico of the Erechtheum we get a true echo of the Asian manner. Similar entablatures to this at Ephesus, varying slightly in detail, must have existed at Miletus, Sardis, and Aphrodisias, just as we know one existed at Pergamos in the order that crowned the great altar. There is nothing in this form of entablature that is necessarily half formed or unworthy of attention. As used in Asian work it is logically complete and perfectly satisfying.

It is not my intention on the present occasion to enter into points of controversy about the proportions of the front. I will only state that in the diagram of it shown on page 493 I have adhered to the restoration of Professor Lethaby, which does not render any of the columns unduly stilted, by placing two sculptured bases together. And there can be little doubt, at any rate, that this restoration offers much the best æsthetic result. The alternative hypothesis, that of the late Dr. Murray, which has so far been generally accepted, is illustrated at the Museum in a fine drawing by Mr. Cromar Watt.*

We do not see the temple as a subject for colour, perhaps, unless indeed colour was employed on it all over, which is quite probable. Wood states that he found ample evidences of both colour and gilding. Even in a limited scheme of colour, however, such as we fancy may have been employed on the Parthenon, one could readily see the value of subdued rich tones lurking in the shadows of the entablature. But for virility, as sculpturesque mass, the whole must have been a wonderful achievement, and it is remarkable there is so little of the barbaric in it. There is the warm blood of the East in the whole conception, but the sculptures of the circular column bases are as serene and beautiful as anything of the kind in existence. From the foot of the great platform of steps one could look up to them, and see the large rounded curves in all the beauty of their white marble. Such was this magnificent structure exteriorly. It is not difficult to understand that the ancients considered it one of the seven wonders of the world as known to them.

From these mighty Asian temples we turn to some of the better-known Attic work of the Acropolis at Athens as one turns from life-size statuary to a small Greek bronze. The same informing spirit is behind both, in a sense, but where at Ephesus all is colossal, wonder-striking, awe-inspiring, in Attica all is exquisite, refined, more to be lived with. We can trace the exterior of Ephesus and imagine it vividly enough in its giant proportions. But in the Parthenon we see the whole design, outside and in, and from descriptions and copies conjecture what was to the ancients the wonder of the whole, the Athena Parthenos of Pheidias. Truly the exterior of the shrine which contained this wonderful statue was perfect in every detail, and even now, in its ruined state, it is the subtlety of proportion and the refinement which charm even more than the mellow richness of the material. The few but very delicate horizontal markings which relieved the boldness of the general forms; the broad vertical "thumb-markings" of the triglyphs; the shimmer of the Pan-Athenaic frieze high up in reflected light, binding the whole of the cella wall together; the largeness of play in the pose of the pediment

* "The Sculptured Columns of the Temple of Diana at Ephesus," by Dr. Alex. S. Murray, JOURNAL R.I.B.A. 21 November 1895.

figures; the delicate flutings of the columns, resting on a base which is refined down to a flush surface; the beauty of the lovely bowl-like capitals; the simplicity and reserve of the stylobate—colour perhaps sparingly used here, though, on the whole, mellow and warm and opaque, not coldly translucent—all this is familiar enough, though barely recognised in its fulness. It becomes incomparably finer when we apprehend what the great Athena was like; and if the outside was warm and mellow the inside was, in all probability, not mellow only, but rich and splendid and full of great deep colour.

We have ample evidence that these figures which the Greeks put in their finest temples were wonderfully constructed and finished in the most precious materials, and that their fame spread far and wide. Pausanias says about the Parthenon Athena:—

Paus. i. 24.—The statue itself is made of gold and ivory. On the middle of the helmet rests the figure of a Sphinx; and on either side of the helmet griffins are represented. The image of Athena stands erect, and wears a tunic reaching to the feet. On its breast is represented in ivory the head of Medusa, and a Victory about 4 cubits in height stands on one of its hands, while in the other it holds a spear: at its feet rests a shield, and close to the shield is a serpent, which no doubt represents Erechthonius; on the base of the statue the birth of Pandora is wrought in relief.*

Still more elaborate is his description of the figure of Zeus in the temple at Olympia, which was perhaps the most famous of all. He says:—

Paus. v. 10.—Now the god is seated on his throne, and is made of gold and ivory: on his head rests a garland which imitates sprays of olive. In his right hand he bears a Victory, also of ivory and gold, which holds a fillet and has a garland on its head: and in his left there is a sceptre inlaid with every kind of metal; the bird which is perched on the sceptre is the eagle. The sandals of the god and likewise his robe are of gold. On the robe are wrought figures and flowers; these latter are lilies. The throne is diversified with gold and precious stones and ebony and ivory; and there are figures upon it, painted and sculptured. . . . The throne is supported not only by the legs, but also by pillars standing between the legs and equal to them in number.†

In a curiously vivid passage another writer says about the figure of the Delphian Apollo:—

Liban. Orat. 61.—Imagination brings before my eyes that form, the bowl, the lyre, the tunic reaching to the feet, the delicacy of the neck in the marble, the girdle about the bosom which holds the golden tunic together, so that some parts fit closely and others hang loose. He seemed as one that sang.‡

In the hands of the Romans such figures as these would have had a barbaric richness of effect and the appeal would be overstrained. Most, if not all, of the examples of polychrome statuary left to us from Roman times are not convincing. But it is barely possible that the Greeks of the fifth century would have produced other than the finest results. Moreover, the same critics who speak with warm approbation of the architectural features we now admire so much, wax eloquent about the central figures. Whatever the richness of the materials, and whatever apparent realism was aimed at, it is pretty certain that each material was in proper relation and that all were subordinated to breadth and repose. The sculptural character of the figure is indeed of extreme importance, and when one considers the *weight of the appeal* in the exterior sculpture in the Parthenon it is clear that the figure of the goddess, if it were to tell at all, would require all the skill and all the richness which the sculptor was capable of bestowing on it. Pausanias' description is after all the surest guide, though the Lemnian Athena gives some idea of the breadth and benignity which the Athena Parthenos probably had, just as the Varvakeion statuette—that undoubted copy of the great figure—gives us a faint, though very faint, conception of its general form and detail. The fact is, no figure so small as this could possibly do justice to the work that must of necessity have been lavished on the actual statue.

The Parthenon had an exterior peristyle of columns that were 34 feet in height. The pediments contained statuary considerably over life size, its masses generally in scale with the main forms of the architecture, just as the details of its drapery were in scale with the delicacies and refinements of the architectural lines. More inseparable from the architecture, and perfectly in keeping with such features as column caps and triglyphs, were the metopes and the Pan-Athenaic frieze. The free play

* H. Stuart Jones, "*Select Passages*," etc.

† Ibid.

‡ Ibid.

and rounded forms of the figures in the sculptures, carefully adapted as they were to their setting, contrasted finely with the ordered lines of the architecture, punctuated at regular intervals with delicate points of detail, and giving the finishing touch to a structure which was in the truest sense monumental. Yet there was no feature that predominated—no central point of interest. That was reserved for the interior, which we must now consider as a whole in greater detail.

The interior of a Greek temple of the highest class offered invariably a sense of contrast to the exterior. In certain cases, as at Bassae, one finds single columns of the same scale as those of the exterior peristyle, though it was not the rule, and anything like an ordered arrangement of tall columns is not found. In temples of any size, however, colonnades dividing the main space into nave and aisles were a necessity. The prevailing arrangement is found in the temple at Aegina. By means of the superimposed Orders, both harmony and diversity were attained. The scale of the pediment figures was brought directly into the temple by means of the small columns. Above would come the coffering of the ceiling, which was doubtless richly painted. Below would come the votive figures, or, as at Olympia, low screens between the columns, forming a balustrade to the central cella. These would associate the scale of the metopes with the interior, and thus harmony would be further attained. All this, including the floor of the cella, was raised two steps above the pavement of the peristyle. The cella, thus surrounded on three sides by a colonnade in two stories, and closed in the front by a low screen (in which there were doubtless doors which could be thrown open) fronted the great doorway behind the East or principal portico. Considering now the Parthenon, we find, placed well back in the cella and fronting the entrance, on a large slab of black marble—that to which the whole exterior and interior composition led up—the image of the goddess, which alone assimilated into itself the scale and proportion of the entire building down to the minutest detail. The figure being 37 feet high at once took the scale of the exterior columns right into the heart of the temple, while the break of scale of the interior Orders would give immense emphasis to it. Its multiplicity of parts would give the finishing touch which would completely reconcile the inner Orders and accessories with the exterior work. The metopes would be in scale with the snakes of the goddess, the pediment figures with her limbs, and the Pan-Athenaic frieze with minor details. The light would be sparing—almost at times gloomy—but the Eastern sun after dawn would sweep right into the interior, lighting up the base of the great statue, and throwing up the head and shoulders with wonderful reflected light as it rose up high into the obscurity of the roof. The inner peristyle might have been generally light in tone and plain; the figure light but extraordinarily rich, flashing with gems and gold. The entire setting to this must have been in a rich deep scheme of colour. Pausanias says about Olympia "There are screens like walls which bar the ingress. Of these screens, that which is opposite the door is covered with plain blue enamel; but the rest of them are decorated with paintings by Panainos."

The great figures of the Athena Parthenos and the Zeus at Olympia must each have been a feast of colour to the eye and full of the most beautiful detail. It is questionable if these works were not as nearly divine as anything that has ever been produced by the hand of man. It is obvious from ancient writers that they were regarded as transcendent works of art, far excelling the architectural sculpture which surrounded them.

THE HENRY O. AVERY ARCHITECTURAL LIBRARY OF COLUMBIA UNIVERSITY, NEW YORK.

By EDWARD R. SMITH, Reference Librarian, Avery Library.

I.—THE BUILDING.

IN the 'eighties Lower Fifth Avenue had not lost the intimacy of early days. Many old families still resided on the northern side of Washington Square, and as far up town as Fourteenth Street. Near this upper limit were two brick houses in the quiet old American style, similar in design, and covered with wistaria. The owner lived in one, and in the other conducted a business in pictures and art works of all kinds. The place was known to all the world as a treasure-house of things beautiful, and as the home of one of those fine commercial reputations which characterised old New York.

The Averys are a large New England family of English origin. Mr. Samuel Putman Avery began life as an engraver on wood. Under the influence of a refined and artistic temperament, and improving exceptional opportunities, he became interested in the collections of paintings and other objects of art, which were afterwards sold as opportunity offered. A special advantage came with his appointment as Commissioner of Fine Arts for the United States at the Paris Exposition of 1867. This brought him into intimate contact with the art of Europe, a familiarity which made possible a noble career as connoisseur, collector and philanthropist.

His younger son, Henry Ogden Avery, entered the profession of architecture and began his training (in 1870) with Mr. Russell Sturgis, who undertook the training of a few boys in the personal English manner. In 1872 Henry Avery entered the *Ecole des Beaux-Arts* in Paris, and made a fine reputation in the atelier of Jules André. In 1879 he returned to New York and, entering the office of Richard Hunt, undertook the management of several of Mr. Hunt's most important undertakings. In 1883 he opened an office in 368, Fifth Avenue, where he accumulated an office library of several thousand volumes.

At his death, in 1890, the disposition of this library became a matter of much concern to his parents, and at the suggestion of Mr. Sturgis it was deposited with the authorities of Columbia College. Mr. Sturgis understood well the importance of providing in New York a standard architectural library, and found in Mr. Avery a man with precisely the qualifications required to carry out his long-cherished scheme; endowments were provided, and the accumulation of books began on a large scale.

The library has been fortunate in the provision

which has been made for its accommodation. In the beginning it occupied two attractive rooms in a beautiful Gothic building in Forty-ninth Street, designed by C. C. Haight. A little place it was, with the privacy, intimacy, and charm which are characteristic of the mediæval type. In the noble building which all the world recognises as the Low Library, erected by Mr. Charles Follen McKim in 1897, the conditions were reversed. Instead of mediæval intimacy, the new home expressed the monumental simplicity and repose of classic architecture.

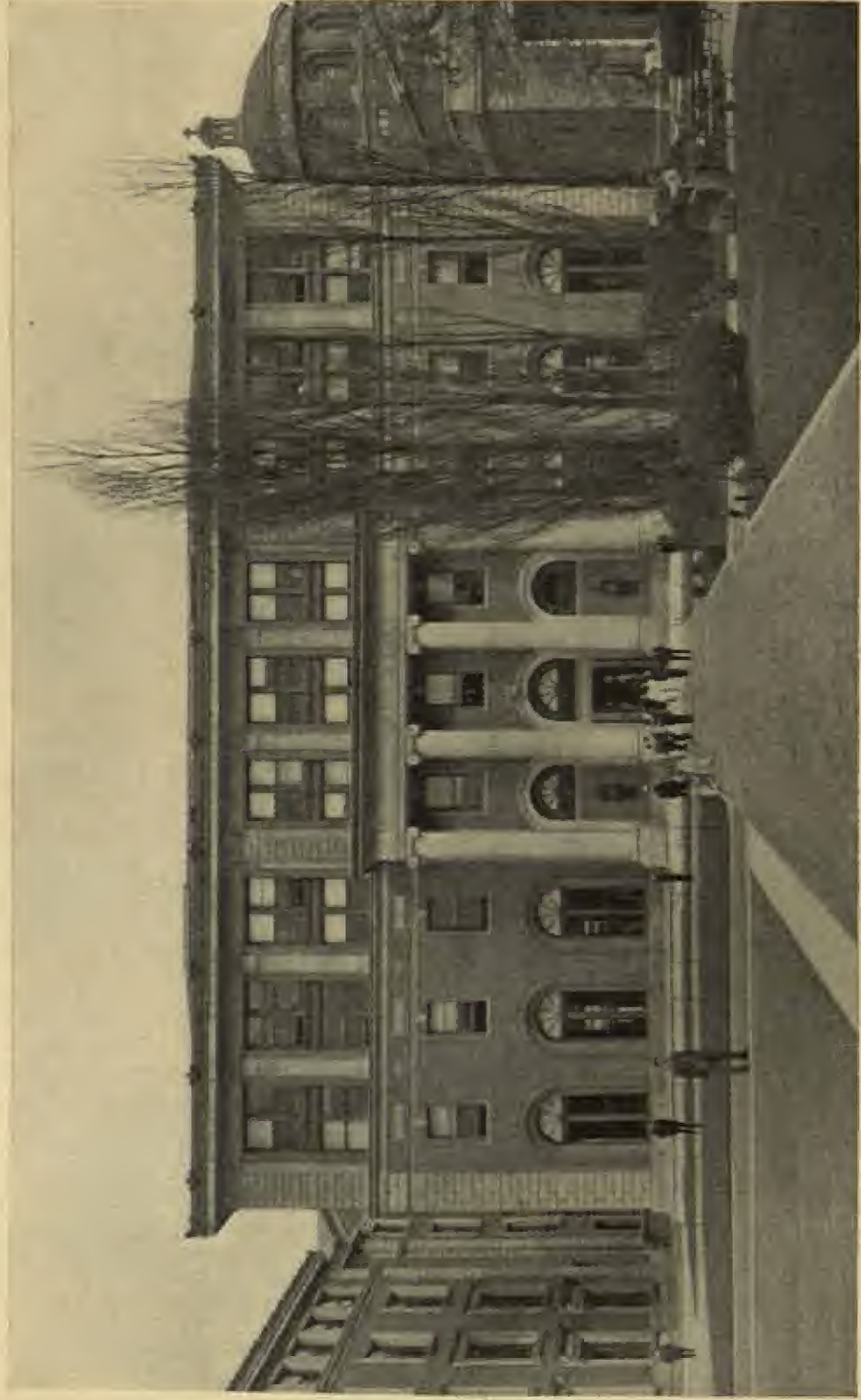
To the Avery Library was given the eastern suite of three rooms on the main floor. The reading room was arranged in alcoves, following the type set at Merton College, the design of the cases being suggested by those of Peterhouse, Cambridge. The furnishings were extremely successful, but the beauty of the room lay in the large display of books which covered nearly all the visible surfaces. Architectural books are substantial, and when they are well bound with an abundance of fine leather and gold the colour effect is good.

About five years ago intimation came to us that the good people who had done so much were disposed to do more, and would be pleased to erect a separate building for the exclusive use of the Avery Library. The duty of preparing designs was conferred upon the office of McKim, Mead and White, and became the special charge of Mr. William M. Kendall of that firm. As the plans of the Columbia University buildings have been thoroughly illustrated, we may assume that their disposition is understood.

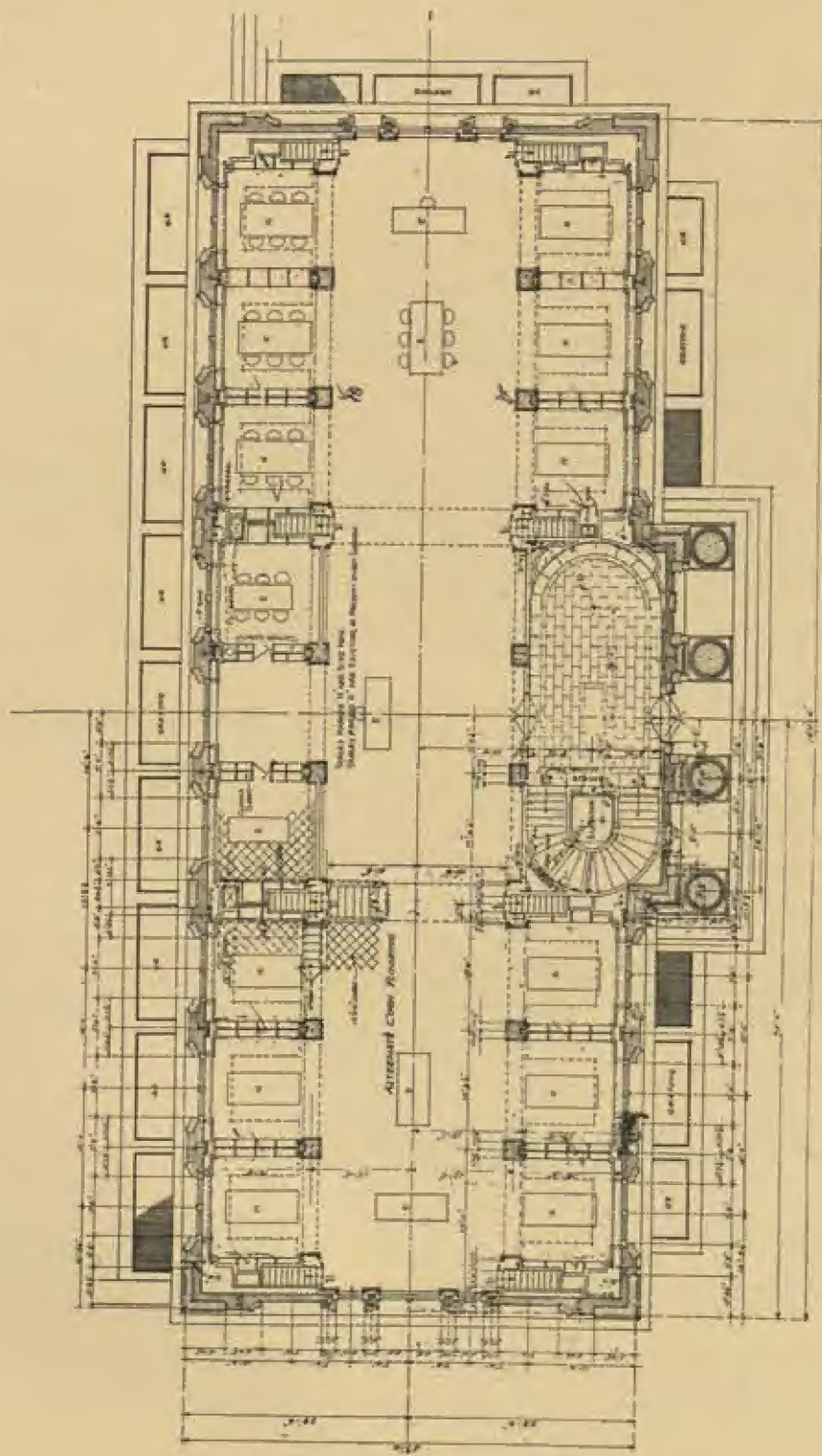
In order to place the new Avery building as near the central library as possible, it was necessary to give it location in the inner rectangle, and a plot was chosen at the north-eastern corner. The dimensions of all academic buildings are predetermined. The buildings of the inner rectangle must be 150 feet long, 57 feet wide, and 70 feet high to the cornice line, with one story below the ground level.

The basement story was reserved for stacks, a lounging room, a cloak room, and a room for the vacuum cleaner, humidifier, and other necessities. The large reading room of the library claimed the main floor, and here was centred the interest and difficulty of the design.

The theory and practice of library construction are now well understood. On the whole, it may be said that the alcove arrangement is not approved by librarians. Alcoves expose property, and, unless they are large, there is no proper circulation about the tables. In special libraries where readers must be



THE AVERY ARCHITECTURAL LIBRARY, COLUMBIA UNIVERSITY, NEW YORK CITY. (McKim, Mead, and White, Architects.)



THE LIBRARY ARCHITECTURAL LIBRARY, COLUMBIA UNIVERSITY: FIRST FLOOR PLAN.

near their books, it is considered better to mass the shelves on one side of a room and the tables on the other, as in the new State Library at Hartford. In the design of our new building, this safe and convenient disposition was impossible. Its architectural character required a monumental treatment of the main story in the exterior elevation, which was secured by a series of arched windows, broad and high, with ample space between them. To obstruct such attractive windows with shelves was impossible. The architect was obliged to place the stacks between the windows, thus creating alcoves in two stories and fifteen feet between centres, providing ample space between the tables four feet wide, and the shelves. Before each alcove is an exhibition screen which transforms it into a secluded study, with a great window upon one of the university courts. Between the alcoves on either side, the floor space, 21 feet wide, is kept open and forms the central aisle of the room, 20 feet high, with a large triple window at either end.

The central space forms a noble interior. Each of the stacks between the alcoves is faced with a pier of Botticino marble, terminated above by a rectangular capital suggested by the ante-capital from the *Temenos* of Priene. A fine Greek quality is presented in all the vertical features of the room, including the panelling of the new wall surfaces, which also hold the quiet colour of the marble.

The most beautiful feature of the room is the ceiling, in three large bays entirely similar in their design, which consists of a central panel framed by a meander, in the centre of which is a circular lacuna about a foot deep, decorated with a simple pattern of flat quatrefoils in panels. In the corners between the circle and the square are medallion portraits of famous Italian connoisseurs and architects surrounded by wreaths. The remainder of the ceiling consists of rectangular coffers decorated simply by bead-mouldings. It is surprising that an arrangement so simple as this should be so effective. The early Italian quality of the ceiling harmonises perfectly with the Greek treatment of the wall, and together they create a most pleasing *ensemble*.

The interior treatment of the main door of the room is early Italian, severe and delicate, and the view when the door is opened, through the vestibule into the north court of the University, is charming to a degree not to be expected in a commercial city like New York.

The design of the furniture was taken over without change from that used in the old room. The heavy oak tables have Baroque supports not at all in the delicate character of the rest of the room, but still harmonious. The chairs are large, with fine movement of line. The arrangement of the librarian's table and of his two offices before the main door is easy and unconventional, suggesting little of the official appearance of a library. Altogether the effect of the room is simple, delicate, large, open, and luminous, with attractive out-of-door glimpses of the other buildings in the University campus.

The alcove arrangement is peculiarly suited to books on architecture. The architectural student does not know beforehand precisely what he requires. He wishes to range for suggestion. By massing similar material in alcoves with good tables and plenty of light, the librarian meets the requirements of his reader perfectly. At the same time the alcove forces him to accept the open shelf, and increases the difficulties of custodianship. The Avery books have always been wide open to a degree which one might suppose to be impossible with material so valuable as this; but our loss has not been large. It is in no way commensurate with the advantage which must come to students from the open shelf. We lock up the very fine things, of course.

The three stories above the reading room are, at present, occupied by the architectural school, and provide excellent quarters for drawing and lectures. The upper story is cleverly arranged to furnish a large amount of illumination for the tables.

The frame of the building is powerful, fit to bear any burden of books which may be placed upon it. At some time in the future, the two stories immediately above the reading room will be cut up into "seminars" for special departments of a general art library. Already two rooms have been set apart for Greek archaeology. Roman archaeology should be treated in the same way, and like provision must be made eventually for the art and archaeology of India and the Far East. The literature of the fine arts, which may come within the scope of university work, probably includes about 100,000 volumes, which is less than the capacity of the Avery building. At present the Avery collection contains 21,486 volumes. In the University collections including the Avery there are 27,626 volumes on various subjects related to the arts of design. This is the largest art collection in America.

The upper story will in the end become an exhibition room, and has been designed for use and appearance in this capacity. With such large areas of glass, it will be possible to dispose the light in various ways. A top light may be secured for pictures, and side lights for exhibition of minor works, binding, porcelain, and the like.

The architect has secured in the exterior of his building results nearly as interesting as those which have made the reading room one of the most beautiful pieces in America. The façades are clever and erudite, like all Mr. Kendall's work. The arches of the large windows are deeply revealed in cavetto with heavy rolls on the outer rims, and are perfectly foiled by the simple rectangular openings above. The pilaster treatment in the upper two stories is original, although that region will not be complete until the bronze grilles in a Greek pattern are added in the lower sashes of the windows.

The carefully studied combination of red brick and grey limestone provides an excellent colour effect.

On either side of the entrance casts of the Medici



THE AVERY ARCHITECTURAL LIBRARY: ENTRANCE DETAIL.

lions from the Loggia dei Lanzi lend distinction to the façade.

In a country which builds as rapidly as ours, and which has its centre of constructive activity so definitely established in its metropolitan city, the architectural school of the metropolis must in the end dominate the profession, and must derive unlimited advantage from the attractive and appropriate home which it has received from Mr. S. P. Avery, the second of the name.

II.—THE BOOKS.

It may frequently surprise men who enter the profession of architecture to discover how dependent they are upon books. In many of its operations architecture is based upon precise science. A building rests upon its availability, and that depends upon the correctness with which a various multitude of things is done, and that again depends upon the architect's library.

The architect must rely no less upon books in the artistic than in the practical part of his work. The psychology of design is not perfectly understood. Why one combination of lines and colours which the designer conceives is agreeable and another is not, is not apparent. In the final analysis it is probable that we will discover that the standard of judgment is posited with the act of creation. That is, we make what we like, and like what we make. At any rate it is not possible for any one person to create an accepted architectural style, and very rarely is it possible for one person to create a decorative motive which will become permanent. Style crystallizes gradually in the out-working of large practice, and calls for a record in the accumulation of illustrations and of books.

The mediæval styles were so logical and structural in character that they needed no literature and created none. In the classic series, however, books have followed building closely. Greek civilisation produced a fine architectural literature, which was collected in the library of Augustus and still lives in the treatise of Vitruvius. After the recovery of Vitruvius in the fifteenth century the number of books on architecture increased rapidly.

The modern architect, reaching as he does into every region and into every period, cannot live without books. Where there are many architects and there is practice on a large scale, a central architectural library is necessary. This necessity seems first to have defined itself in London. No architectural collection deserves standing until it has secured a complete set of the *TRANSACTIONS* and *JOURNAL* of the Royal Institute of British Architects. In the many journeys which the librarian makes in this record of the Institute he is forced to note the central and strategic position of the library. In the Address published in the first volume of the *TRANSACTIONS* in 1835-36 it is noted that "the formation of a library of printed

works of every species connected with architecture is of course of primary importance."

The history of the Library of the Royal Institute may be followed in its *TRANSACTIONS* and *JOURNAL* and *KALENDAR*, and is most interesting. The number of purchases from any fund has never been large, the management depending rather upon donations of members and friends. An examination of the lists of donors reveals the names of nearly all British architects of standing, and of many prominent in other lands. It is this broad personal interest which gives to the collection the choice and intimate character which no other architectural library is likely to acquire. From time to time lists of *desiderata* have been published in the *JOURNAL* which have apparently been promptly met by gifts from members.

One of these lists, in Professor George Aitchison's article in the *JOURNAL*, 3rd series, Vol. II., is concerned with needed editions of Vitruvius, of which the Institute has probably now a complete set. The genius of the Institute library in the early days was Wyatt Papworth, who was made secretary of the Library Committee when that body was formed in 1860. Papworth also created the Architectural Publication Society's Dictionary. In 1881 a notable addition was made to the resources of the library, in the establishment of its loan collection.

This work of the Institute was well known in New York and made a deep impression upon the mind of the late Russell Sturgis. Mr. Sturgis was a good architect; but his breadth of mind, and the extent of his sympathies, could not be contained within the four walls of his office. He loved to range over the field of architectural activity, with many excursions into general humanities. He always bore in mind the possibility of creating in New York a collection of monumental works on architecture which the average architect may be unable to buy for himself. His opportunity for realisation came in 1890 at the death of his pupil and friend, Henry O. Avery, a young architect of great achievement and still greater promise, associated at the moment with Mr. Richard M. Hunt. The propriety of creating a monument to this scholarly architect was apparent, and no monument could have been more appropriate than the realisation of Mr. Sturgis' cherished and well-matured plan for a Public Library of Architecture.

Mr. Avery's father, the late Samuel P. Avery, was precisely the person to whom such a plan would appeal. He came of the original New England stock, which is English *pur sang*. Beginning life as a wood engraver he developed a temperamental appreciation for fine things, and a shrewd comprehension of their financial value, which led directly to successful commerce in works of artistic importance. He had an unflinching sense of good work and a genial sympathy for the good worker.

As United States Commissioner for the Fine Arts at the Exposition of 1867, in Paris, he familiarised himself with modern French art, and his considerable



THE AVERY ARCHITECTURAL LIBRARY: ENTRANCE PORTICO.

fortune was created largely in the selection of paintings by the great French artists of the nineteenth century. The enthusiastic appreciation of the works of the painters of Barbizon, which has characterised the collectors of America, may be traced nearly as much to Mr. Avery's excellent selection as to their brilliant exploitation by the great Boston painter, William Morris Hunt.

The architectural library was brought to Columbia University because that institution included a professional school, and also for the excellent reason, much appreciated by Mr. Sturgis, that the university library at that time alone in the city of New York was open in the evening. An architect, like every other busy man, is practically excluded from his library unless he may use it at night. The receptive moments of an active mind belong to the books.

The modern metropolitan university feeds the activities of the community, and is supported by them. It was proper that when one of these activities came to the university, with its special library, it should retain some element of control. The founders met this requirement by the creation of a purchasing committee, consisting of the Librarian of the University, the Professor of Architecture, and Mr. Sturgis, who represented the profession at large. At the death of Mr. Sturgis, in 1909, Mr. Glenn Brown, Secretary of the American Institute of Architects, was elected to replace him, deserving the selection, certainly, as the author of the *History of the United States Capitol* (1903), the only monumental monograph yet published on any American building. As an outcome of his election the Avery Library may become, in the near future, the official collection of the American Institute.

In the selection of books the founders were to a considerable extent guided by the catalogues of the collection in Conduit Street. They felt, as keenly as the London architects had, the importance of laying a strong foundation in the classic literature of the profession. The Avery Library is well stocked with the old books. Mr. Avery was himself especially active in this part of the work, and loved to search the shops and catalogues for fine old things.

Of Vitruvius, the Avery contains forty editions and translations, as against the probably complete list in the Conduit Street Library. We have the *Editio Princeps* of Alberti's *De Re Aedificatoria* (1485), and many other editions, translations, and works of this fine old master, who was secretary to six popes, and the leading consulting architect of the Italian Renaissance.

The name Vignola may be applied to any manual of the Orders which follows Barozzi's method precisely as geometries once took the name of Euclid. The Avery has the first editions of the *Regola dell'cinque Ordini d'Architettura* (1563) and a long list of other editions, and the *Due Regole della Prospettiva Pratica* (1583).

From the fact that the Earl of Burlington brought

home many of Palladio's drawings the patron saint of English classicism is Palladio rather than Vignola, who was followed by the French. The Institute may well treasure its first edition of 1570, with the autograph of the Earl of Burlington, and the French and Italian edition of G. Leoni, with autograph notes by Inigo Jones.

We have the works of Vincenzo Scamozzi, San Michele, and the seven books of Sebastiano Serlio in early editions; but these are not in every case the earliest. Serlio began the series with the publication of the fourth book. Great things were expected of Sebastiano Serlio when he was called to Fontainebleau by Francis I. in 1541, but he has little to show for himself now except these quaint old books.

English-speaking people have been taught that the Baroque period in Italy, from the middle of the sixteenth century to the middle of the eighteenth, is a time of artistic degeneracy. Under the influence of German writers we are broader now, and feel that this period is a vast caldron out of which much of modern art has come. Oil painting has come out of it, with Rubens, Rembrandt, and Velasquez. Etching and engraving also with Rembrandt and Callot. The entire body of architecture, of sculpture, and architectural decoration which culminates in the prodigious performance of the reign of Louis XIV., all this is the product of the Italian Baroque period. In the literature of this period both libraries have, in addition to those mentioned, the curious works of Boromino, Guarini, Labacco, the Galli da Bibiena, Pozzo's wonderful *Perspectiva Pictorum et Architectorum*, and many others. There is more to do in this interesting field, which includes books on theatres, pageants, stage-setting, and jardinage—all arts especially associated with the Baroque period.

Any one who has enjoyed a large contact with books of all kinds, when called upon to select the most magnificent of them all, at once recalls the work of Giovanni Battista Piranesi (1720-1778). As an artist he stands with the greatest—with Rubens, Rembrandt, and his great contemporaries the Tiepolo. The superb Baroque virility still lives in him and vitalises his monumental Roman classicism. Thinking with Piranesi is not ratiocination, it is illumination. He saw the entirety of Rome—not only the accident of ruin, with its charm of picturesqueness, but also the vast solidity behind the ruin. Who has not seen Piranesi has not seen Rome, either ancient or modern.

It is difficult to appreciate the fact that Piranesi is a contemporary of Winckelmann; but, after all, it is a similar power of poetic and artistic insight which distinguishes Winckelmann from all archaeologists who have followed him. Piranesi is so much of an artist that one may forget that he is a great scholar and archaeologist. Properly interpreted, there is no work so informing as his on the antiquities of Rome. There is, however, always the difficulty of separating information from imagination. After all, Piranesi's imagination furnishes the soundest Roman quality of

his work. Much of his best material is in his "scenographiæ." By scenographia he does not mean a restoration: he means a visualisation out of their

Nothing of this building is now to be seen. Where the Septa Julia stood, the modern city is heavily built, and in the buildings are various fragments of the old



THE AVERY ARCHITECTURAL LIBRARY, COLUMBIA UNIVERSITY: INTERIOR LOOKING SOUTH.

actual surroundings of existing fragments, and the recomposition of them, rather freely treated, into fine pictorial presentations. For instance, Plate XV. of Vol. X. represents the Porticus Septorum Juliorum.

construction. These Piranesi has visualised out and recomposed in his splendid plate, free, powerful, and artistic, and at the same time full of information for the scholar.

To discover and procure a perfect set of Piranesi is a difficult matter for the librarian of an architectural library. He should not be satisfied with any impressions except the Roman, made by the Giovanni Battista himself. These are superb and rare. Even in the time of Piranesi the volumes were made up differently, and it has always been good commerce to cut out the very fine things and to sell them separately. Samuel's clever biography is a good guide. The cold-blooded plates of the *Edifici di Roma Antica* of Luigi Canina (1793-1856) supplement well the exalted inspirations of Piranesi.

American architects are perhaps more concerned with the classics of French architecture. Our best men finish their education in Paris, and learn the flavour of old books on the Quai Malaquais. There are some fine collections of rare French books in the great offices down town; the best being probably that of Whitney and Lloyd Warren, architects of the new Grand Central Station. Mr. Ogden Codman has a beautiful collection. Mr. Henry O. Avery had many French books, and his father added more to the library. We have the beautiful *Premier Tome de l'Architecture* of Philibert de l'Orme, 1567. The *Nouvelles Inventions pour bien bastir* appears in the edition of 1576. Berté, in his *Les Grands Architectes Français*, prints the *Instruction de Monsieur d'Ivry dict De l'Orme*, a significant autobiography.

Jacques Androuet proudly drew a circle over the door of his shop, and his splendid family of architects found du Cerceau as honourable as any title of nobility. The first Jacques Androuet built little, if anything, preferring to dream about architecture and to make no end of quaint copperplate engravings of matters real or imaginary, which he bound up into books with various titles, all delightful and interesting, but only one having real historical value. The *Plus excellents Bastiments de France* (2 vols, 1576) contains so many good engravings of buildings long ago destroyed that no architectural library can afford to be without it.

The period of Louis XIV. was one of immense activity, both in engraving and architecture. In the seventeenth and eighteenth centuries both arts reached the summit of excellence. Innumerable plates were made illustrating the architecture and decorative motives of the time, which are collected by American architects during their Parisian apprenticeship. At present, however, the Avery does not collect engravings or drawings, except as they are made up into books. In the preservation by engraving, of the buildings and decorations of the seventeenth and eighteenth centuries, the leaders were Jean Marot (1620-1679) and his son, Daniel Marot (1661-1718). The Marots published a large body of architectural plates, some of which, after their death, were collected in two monumental works. The *Grand Marot*, published in 1727, included the larger plates, always showing the signature, J. Marot; and was the first treatise to bear the title *Architecture Française*. The *Petit Marot* is a single quarto volume, which was pub-

lished by Jombert in 1764, and bears the title *Petit Œuvre d'Architecture de Jean Marot, Architecte et Graveur, &c.* The two Marots are not at this moment in the Avery. This is almost our only serious lacuna.

The Marots were followed by the Mariettes, the great family of engravers, collectors, and publishers, founded by Pierre (d. 1677), who was succeeded by his grandson Jean (1654-1742), and he by his son Pierre-Jean (1694-1774), who is considered by many to have been the greatest connoisseur in the history of collection. The Mariettes published the first two volumes of their own *Architecture Française ou Recueil des Plans, Elevations, Coupes et Profils des Eglises, Palais, Hôtels et Maisons particulières de Paris, &c.*, chez Jean Mariette, Rue Saint-Jacques, aux Colonnes d'Hercules, MDCCXXVII. A third volume was published in 1738 with a slightly different title. Some of the plates in this second *Architecture Française* are signed Fr Blondel (J. F. Blondel) Sculpt.

In 1750 Pierre Jean Mariette turned over his publishing business to Jombert, who, in 1751, issued the third *Architecture Française*, that of Jacques François Blondel (1705-1774), the "Grand Blondel" of the Parisian ateliers. Blondel was a fine architect and the most notable of all the great French teachers of architecture. He began his course at the Académie de l'Architecture in 1762, and in 1771-77 published its matter in the *Cours d'Architecture, ou Traité de la Décoration, Distribution et Construction des Bâtimens*. The book was completed by Patte after the author's death, and is the "Petit Blondel" of the ateliers.

The "Grand Blondel," or *Architecture Française, ou Recueil des Plans, Elevations, Coupes et Profils des Eglises, Maisons Royales, Palais, Hôtels et Edifices les plus considérables de Paris, &c.*, is the noblest monument in the French architect's library: large, abundant, dignified, severe, with generous text. In this book the fine plates of Marot reappear with signature and those of Mariette without. Sometimes they were redrawn and reengraved. More were added by many masters, and about the entire body was woven a fine treatise on architecture. Modern Paris has played havoc with the old quarters of the Marais and the Faubourg Saint-Germain, which live again in Blondel's book.

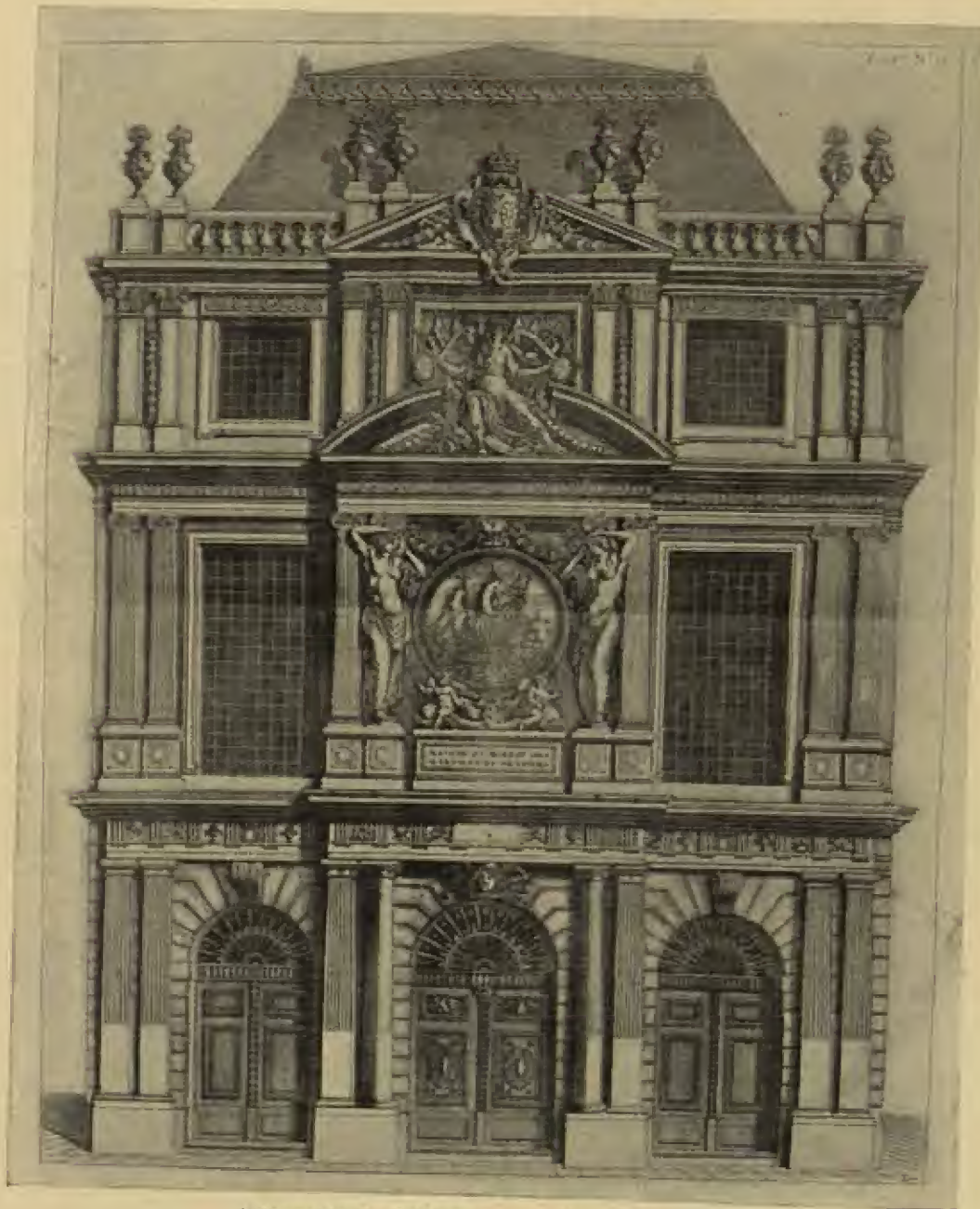
The history of French art in the olden time is largely the record of great families born and bred to handicraft. Such were the Lepautres—Jean Lepautre, his brother Antoine, his sons Pierre and Jacques, and his nephews Jean Dolivar, and the sculptor Pierre, son of Antoine Lepautre.

Jean Lepautre is the most masterly *ornemaniste* of the French series. Mariette in the *Abecelario* says that his vivacity and the impetuosity of his invention were so great that he did not even draw his myriad inventions, but sketched them on the copper and went ahead with his point. His *Œuvres d'Architecture* was collected by the Mariettes, and published by Jombert in 1751 (3 vols. quarto). The *Œuvres d'Architecture* of Antoine Lepautre, a much less ambitious book, was

also collected by Mariette and published by Jombert. A good architect was Antoine. Everyone knows the entrance to his Hôtel de Beauvais.

Jean Bérain followed Lepautre as the leader of Le

tiune our analysis of the French masters would be interesting, but unnecessary. There are many: d'Aviler, Desgodetz, who furnished the archæological substructure of the period, Patte, Roland le Virloys



"Bureau des Marchands." From the "Grand Blondet."

Brun's assistants in the creation of the style Louis Quatorze. After his death his matter was collected in an *Œuvre de Bérain*, which is represented in the Avery by Quantin's reprint.

Every librarian loves his old books best. To con-

(Dictionnaire), Bullet, Félibien des Avaux, Fréart de Chambray, the great Neuforge, Peyre; and the *ornemanistes*, J. A. Meissonnier, the Germans, the Cuvilliers, De la Fosse, Lalonde—the world's greatest craftsmen.

The architectural classics are not confined to Italy and France. Germany has an interesting list. We have a beautiful lot of the old vellum-bound volumes with their gorgeous titles in red and black letter. German architecture has always been derived. In the eighteenth century Southern Germany and Austria especially took up a large part of the Italian current.

Joachim von Sandraart und Stackau (1606-88) published the invaluable record of the art of the Baroque period which we know as the *Deutsche Academie der Bau Bildhauer und Maler Kunst, worin die regeln und lehr sätze dieser Künste gegeben, &c.* (Nürnberg, 1768-1775, 8 vols.). Sandraart was himself a fair draughtsman in an academic way. Johann Bernard Fischer von Erlach (1650-1723), a late contemporary of Sandraart, was a pupil of Carlo Fontana. Fischer was fertile in monumental conceptions. His Hof-bibliothek in Vienna, although it does not commend itself to the practical librarian, expresses the prodigious rush and swing of the Baroque, born of Michelangelo's epic dreams, Bernini's chisel, and Rubens' pencil. Fischer left an amusing old book, *Entwurf einer historischen Architectur, &c.*, a long folio published in Vienna in 1721 and in Leipzig in 1725, full of curious attempts to visualise the descriptions which classic authors have given of such buildings as the Pyramids, the Mausoleum of Halicarnassus, and the Temple of Diana at Ephesus. The illustrations of historic buildings are valuable.

There are, moreover, in the Avery many fine Dutch and Flemish classics, led by Peter Paul Rubens, *Palazzi di Genova*, Antwerp, 1622. We should mention the *Arte y uso de Architectura* of Fra. Laurencio di San Nicolas (1663-1667) among the Spanish books; not a large number.

English architecture, the residential and educational especially, makes a genial appeal to the American public. The old English architectural books are interesting. John Evelyn was concerned with architecture although he preferred out-of-doors to indoors. He took the trouble to introduce in translation the *Parallèle* of Roland Fréart, Sieur de Chambray, under the title *Parallel of the Antient Architecture with the Modern*, to which he added an account of architects and architecture and Leon Battista Alberti's *Treatise on Statues*. The third edition (1723), which we have, includes Sir Henry Wotton's *Elements of Architecture*. Colin Campbell's *Vitruvius Britannicus, or The British Architect*, was published in 1717. The third volume, with a French title, was added in 1725 before the appearance of Marot's *Architecture Française* (1727). It is mentioned with similar Swedish and Danish *Vitruves* in the preface of the "Grand Blondel." Campbell's book was continued by Wolfe and Gandon (1767-71), by Richardson (1802-08), and by Robinson (1833-41).

Dr. Henry Aldrich (1647-1710), logician and architect, a friend of Sir Christopher Wren, left some good buildings in Oxford, and his *Elementa Architecturæ Civilis*, which is a digest of the Italian and French

writers known to him. Aldrich's Latin text, with an English translation, was published by the Rev. Philip Smyth in 1789. Gibbs' *Book of Architecture* (1728) is a record of his own work. The best of the English classics is Sir William Chambers' *Treatise on Civil Architecture*. We have the second edition printed in 1768. In the third edition (1791) the title changes to *Treatise on the Decorative Part of Civil Architecture*. In the fourth edition, that of John B. Papworth (1826), addition is made by Gwilt of the Greek Orders which Sir William so much despised.

Chambers' *Civil Architecture* was the leading manual of the fine practitioners Towne, Hoadley, Damon, and others of our early American period. We call it Colonial because there is no other convenient name. The interesting details of our City Hall in New York were taken from plate 20 of this book. There must have been at the same time in America a few copies of the works in architecture of Robert and James Adam, the first volume published in 1773-78. It was printed together with the second and third in 1822. The Adam book was based largely on the work of Piranesi, and was published both in French and English, furnishing a foundation for the Louis XVI. and Empire styles in Paris, as well as for the decoration of the Colonial style in America.

In the classification of the Avery Library, the periodicals follow the classics. In every special library they have great strategic importance, as they give us the latest results—a matter of much moment when one is dealing with young people. The nascent architect lives vividly in the present. He must know what the people who are with him and about him are liking and doing. He must see the last *concours*, the last prize drawing, the last production of the reigning idol of the ateliers. These things are caught up at once in the plates of the current journals. The love of older work comes later. Our periodical list is a large one, containing entries from every land and in every tongue, to the number of 145 journals and 73 annuals and 3 newspapers. Much attention has been given to the completion of sets. As the periodicals are finished, bound, and recede upon the shelves, they create by themselves a powerful architectural library.

The oldest of the architectural periodicals, and the master journal of the profession, is the series published by the Royal Institute of British Architects, which began under the title *TRANSACTIONS* with the session 1835, although the first volume has the date 1836, synchronous with the first volume of the *Allgemeine Bauzeitung*. From 1853 to 1875 the title reads "Papers read at the Royal Institute," and from 1875 to 1878, "Sessional Papers." The *Journal of Proceedings* was published parallel with the *TRANSACTIONS* until 1893, when the sets were merged under the title *Journal of the Royal Institute of British Architects, Third Series*. If any question arises in the field of one of the broadest of human professions, which is especially speculative or recondite, the inquirer is more likely to discover the answer in the *JOURNAL* of the R.I.B.A.

than in any other book. The many searches which the librarian makes in this beautiful set are full of refreshment and interest.

The *Builder* was begun in 1843 and has always been an excellent collector of architectural news. The *Building News* (1858), the *Architect and Contract Reporter* (1869), and the *Architects' and Builders' Journal* (1895) are all much on the same lines as the *Builder*. Later English journals like the *Architectural Review* have been broader and more artistic in form.

Förster's *Allgemeine Bauzeitung*, of which we have a superb set, began its publication in the same year as the *TRANSACTIONS* of the R.I.B.A., 1836. In the third volume appears Hoffer's presentation of the refinement of Greek architecture as shown in the curves of the Parthenon, a subject which has figured large in the investigations of Pennethorne, Penrose, and Good-year. All matters related to architecture have been treated in this monumental journal, which, like other German architectural periodicals, has derived much dignity from the inclusion of matter on engineering.

César Daly's *Revue Générale de l'Architecture et de l'Art Public* (1840) was the earliest French rival of Förster's *Bauzeitung*. The *Revue* does not often go out of France, but of the activity of France and Paris in the middle nineteenth century, and especially of that of the Second Empire, it is an invaluable record. The account which is given of Haussmann's transformation is peculiar. The great buildings from the Colonne de Juillet to Duc's Palais de Justice are illustrated in detail, but not much information is given concerning the topographical changes during this period.

Among the great architectural journals must be mentioned the *American Architect*, which was begun in 1876. It was modelled closely on the *Builder* in both matter and form. While under the management of William Rotch Ware, it represented satisfactorily the fine generation of architects which is now nearly passed, and which included such men as Professor William Robert Ware, Richard Hunt, Russell Sturgis, Henry O. Avery and others, whose names are as well known in London as in New York. A fine record this of American architecture in the transition period which followed the Civil War.

For no other art than architecture is the camera more necessary and suitable. Since the invention of photography, architectural journals have multiplied rapidly, and have made a much more popular appeal in their greater display and attractiveness. Some, like the English *Architectural Review*, the American *Brickbuilder* (1892), and the French *L'Architecte* (1906) have great dignity and beauty, although it can hardly be said that any surpasses the old *Moniteur des Architectes* (1856), with its copper plates.

The modern German point of view is so radical, there is so evidently a national determination to eliminate conventions and to rest on fundamentals, in the struggle to evolve national style, that an effort at this moment to formulate an opinion is difficult.

All these reconstructed towns and monumental buildings, with occasionally delightful domestic work, are frequently unlike anything which has passed for architecture heretofore. The powerful German journals which come to our table are inspiring, but disturbing; the *Architectonische Rundschau* (1885), the *Baumeister* (1901-), the *Deutsche Konkurrenzen*, and others of a considerable list.

These things are received rather coldly with us, for the reason that our young people prefer to try out the classic conventions first. In Europe the classical point of view may very nearly have run its course; with us it is still full of interest and charm.

Among the German journals, we should mention the *Stadtbau* (1904-), which expresses all possible knowledge of city planning; but, after all, in America we have not fully accepted the gospel according to Sitte, and still think that the simple symmetrical classic conception of a city is to be preferred to German eccentricities. We do not forget the great city maps of France in the seventeenth and eighteenth centuries, like Lemercier's Richelieu, and those of Paris, which were carried to their logical conclusion by Napoleon III. and Haussmann. In any city map drawn by an American architect will be found sufficient firmness and symmetry somewhere.

The Avery is loyal to its main purpose as an architectural library, but is broad enough to carry as much material on the representative arts as the practising architect may need. This includes all the leading art journals. The *Gazette des Beaux-Arts*, the *Revue de l'Art* (1897-), the *Graphische Kunst* (1879-), the *Zeitschrift für Bildende Kunst* (1866-), the *Burlington Magazine* (1903-), the *Connoisseur* (1901-), the *Studio* (1893-), the *Rassegna d'Arte* (1900-), *Bolletino d'Arte*, *l'Arte*, *Storico dell'Arte* (1889-97), *l'Art Flamande et Hollandais*, have sufficient architectural interest to bring them within the scope of the collection.

An interesting field is that of the archaeological journals, of which we have a large collection. The archaeological material of America is limited, and a few journals are sufficient to care for it. The archaeology of England and the Continent of Europe is a different matter. Here numerous regions have their societies, and these again are grouped into larger associations. They all publish journals more or less important, and at more or less regular intervals, which deal with matters of interest in these localities. They include a magnificent amount of information concerning architectural matters of local interest, and constitute a great field of architectural research where the matter of later books first appears. The Avery Library is rich in works of this class, much richer, I think, than the collection of the Institute. There are few libraries in the world in which original research may be done, on so large a scale, so easily. The historical department of the University Library supplements the Avery series, so that one may be sure of finding here practically every archaeological journal of

importance. It will interest many to learn that the notable bibliographies of Mr. Kingsley Porter's *Medieval Architecture* were made here from material immediately at hand.

The collection of books on archaeology, Greek, Roman and other, is in the same condition. All important books are here, either in the general library of the University or in the Avery collection.

To note some of the monumental archaeological journals, Didron's *Annales Archéologiques* was begun in 1844, lasted until 1870, and was contemporaneous with Viollet-le-Duc, and the great school of Mediævalists, which marked the middle of the nineteenth century in France. *L'Ami des Monuments et des Arts*, conceived and directed by Charles Normand, was founded in 1887. It holds the keen eye of Paris upon all beautiful things in France, and sometimes in other lands—a knight-errant, ready to charge upon vandalism wherever it may appear. The *Bulletin Monumentale* was started in 1834 by Arcisse de Caumont, founder of the Société des Antiquaires de Normandie, and of the Société Française pour la Description et la Conservation des Monuments Historiques. De Caumont wrote the classic *Abécédaire, ou Rudiments d'Archéologie* (3rd ed., 1854), and first used the word "roman" (Romanesque) in his *Essai sur l'Architecture religieuse au Moyen Age* (1825). But we cannot discuss all these great works in detail.

The most monumental of the English archaeological journals is *Archæologia*, or *Miscellaneous Tracts relating to Antiquity*, which, begun in 1770, is still as large and strong and English as ever. We have a perfect set in fine condition. The Society of Antiquaries, which conducts the *Archæologia*, dates from Archbishop Parker in the fourteenth of Elizabeth, and is represented by other publications in the Avery Library. The *Archæological Journal* was started in 1845 under the direction of the Central Committee of the British Archaeological Association. After one year, which was marked by the disruption of the British Archaeological Association and the creation of a rival body called the Archaeological Institute of Great Britain and Ireland, the *Archæological Journal* passed to the younger Institute, and its publication was continued by John Parker, of Oxford. In 1846 the British Archaeological Association began publishing again under the title *Journal of the British Archaeological Association*. Both journals are still current. We have entire sets.

We can only mention briefly the *Annales de l'Académie Royale de Belgique*, the *Bonner Jahrbücher*, the *Jahrbücher* of the Prussian and Austrian museums, the *Monumenta Hungariae Archæologica*, the *Mittheilungen der Antiquarischen Gesellschaft zu Zurich*, wonderfully rich in Gallo-Roman metal-work and mediæval Swiss architecture; the *Mission Archéologique Française au Caire*, the *Transactions and Proceedings* of the Japan Society. There are many of these fine books from many countries.

A charming feature of a collection of archaeological

literature is to be found in the records of the smaller local societies, as the *Annales de la Société Historique et Archéologique du Gatinais*, published at Fontainebleau; the *Revue Historique et Archéologique du Maine*, published at Le Mans; *Mémoires de la Société des Antiquaires de l'Ouest*, at Poitiers; *Mémoires de la Société Archéologique du Midi de la France*, at Toulouse; *Mémoires de la Société des Antiquaires de Picardie*, the little society which lives in the shadow of the great church at Amiens, and many more. The local British journals are almost as numerous.

In the matter of local archaeology, one is inclined to give the palm to Germany. The German series are systematic and thorough, like the German army. Paul Clemens' *Kunstdenkmäler der Rhein-provinz* is an excellent example. The entire province is taken up *kreis* by *kreis*, and each town and village in the *kreis* thoroughly handled. Quite like Clemens' book are *Lehfeldt's Bau und Kunstdenkmäler der Provinz Ost Preussen* and others.

The largest advances which have been made in American practice have been in the field of construction. This, however, is related more closely to engineering than to architecture, and is so thoroughly provided for by the department of engineering in the University that it is unnecessary for us to buy more than the common handbooks, Kidder, Birkmire, Freitag, and the like.

All the dictionaries and historical manuals are here of course: among others a beautiful copy of Wyatt Papworth's *Dictionary of the Architectural Publication Society*.

In the field of architectural history every region is represented, and for the most part the regional material is held together on the shelves.

Primitive periods are considered to be within the field of the department of anthropology, and are represented in the Museum of Natural History. The Avery has Catherwood's *Views of Ancient Monuments in Central America* (1844), and several other works illustrating the interesting architecture of the southern and central American regions.

We have many of the great works on Egypt; Lepsius, *Denkmäler*; and Prisse d'Avennes, *Champollion*, and the Napoleonic books are in the General Library. The most useful work on Egypt is the little manual recently published by Professor Breasted, of Chicago.

The Avery Library has been active in providing material on Greek architecture and archaeology. The old things are here; Wheeler and Spon (1682), Stuart and Revett, Pennethorne, Penrose, the Dilettanti Society's publications and the like, with the exceedingly interesting reports of modern researches at Argos, Ephesus, Thera, Priene, Magnesia, &c.

The treatment of Roman architecture and antiquities is similar. We have Piranesi, Canina, Carletti's *Vestigia delle Terme di Tito*, with Carloni's plates (Rome, 1776); Lafrerie, *Speculum Romanæ Magnificentia* (1575); Duperac: *I. Vestige dell'Antichità di Roma* (1575). Cressy and Taylor: *Architectural Antiqui-*

ties of Rome (1822). The modern books are here: Fröhner's *Colonne Trajane*; Huelsen's photographic reproductions of the manuscripts of Cyriacus d'Ancona and Giuliano da San Gallo; all Lanciani's works, and especially his great *Forma Urbis Romæ*.

Most beautiful are the various reproductions of the "envois" of the Académie de France à Rome. D'Espouy's books are familiar. More notable is the splendid series which was begun in 1877 under the title *Restaurations des Monuments Antiques par les Architectes pensionnaires de l'Académie de France à Rome*. In the prospectus of this work the intention is declared of publishing a long series of these reconstructions; but only seven were executed. These, however, are masterly, and include such important monographs as Percier's *Colonne Trajane*, Garnier's famous drawings of the *Temple de Jupiter Panhellénien*, now called Temple of Aphaia at Aegina, and Paulin's *Thermes de Dioclétien*. Garnier's restoration of the Aegina temple which was exhibited at the Salon in 1852 laid the foundation of his reputation. Among the innumerable minor books on Rome may be noted Huelsen's *Roman Forum*, Wickhoff's *Roman Art*, Mrs. Strong's *Roman Sculpture*.

The representation of the architecture of Italy, Medieval and Renaissance, Baroque and Modern, in a library like this is practically complete. Especially charming are the books on the semi-primitive *bassi tempi*, and the Romanesque and Byzantine period. The work of this time has a splendid colour value which appears finely in such books as Wilpert's *Katakomben Roms*, De Rossi's *Mosaici Christiani delle Chiese di Roma* (1899), Ongania's *San Marco*, J. B. Waring's *Examples of Stained Glass, Fresco Ornament, Marble, &c.* (no date), Salazaro's *Studi sui Monumenti dell'Italia Meridionale* (1871), Bunsen's *Basiliken des Christlichen Roms*, Valentini on the Patriarchal basilicas, Fontana's *Raccolta delle Migliori chiese di Roma e Suburbane*. Frothingham's little book on the *Monuments of Christian Rome* is exceedingly helpful.

Ruskin, Ongania, and others have done much for Venice, but Ravenna is almost untouched. There are little books like Jean Paul Richter's *Mosaiken von Ravenna* (1878), but the great work, like that of De Bossi on the Roman Mosaics, is still to come.

The splendid decorative work of John Lafarge was largely based on the mosaics of Ravenna. Rivoira's *Le origini dell'Architettura Lombarda* has changed our point of view in the study of the architecture of northern Europe. Our list should include Dartein's *Architettura Lombarda*, Bertaux' *L'Art dans l'Italie Méridionale* (only one volume published), C. E. Norton's *Historical Studies in Church Building in the Middle Ages*.

Medieval Italy is most appealing to many temperaments, but the Renaissance period is more practicable, and certainly more accessible in books. The architecture of this period is intelligent, carefully designed, and perfectly measured and drawn: and invites the mak-

ing of accurate books. Much of the best architectural literature is in this field.

The greatest of all modern architectural books is the *Architektur der Renaissance in Toscana* (1885-1908), published by the Gesellschaft di San Giorgio, in Florence, under the direction of Baron Heinrich von Geymüller, with the assistance of Carl and Heinrich von Stegmann. It is the typical modern book, basing its historical matter on the archives, with full knowledge of records and documents; and illustrating the buildings by photographs, and the most perfect copperplates ever drawn. One may wish that Letarouilly's *Vatican* and *Edifices de Rome moderne* had been executed as perfectly, but Letarouilly did as well as was possible in his day. The text of the *Edifices* is an invaluable but much-neglected book.

Paoletti di Osvaldo's *L'Architettura e la Scultura del Rinascimento in Venezia* follows the Geymüller Stegmann book closely. It prints the archives, the original documents of the more important buildings. The history of art and architecture is so overgrown with inaccuracies and misstatements, conclusions formed without foundation and ever after believed, that it is a pleasure to turn to Paoletti's solid stories of the Palazzo Ducale, the Ca d'Oro, and of the architects Antonio Rizzo, Marco Coducci, who built the lovely Capella Emiliana, the Solari called Lombardo and Leopardi. Paoletti stops before the appearance of Jacopo Sansovino, unfortunately. The Archives of Venice must be full of information about the great architects of the Palladian period. Palladio we have in Bertotto Scamozzi's *Fabbriche*, and Cicognara covers the later period inadequately in his *Fabbriche di Venezia*. We have been much assisted by the series *Palast-Architektur von Ober-Italien und Toscana*, four volumes edited by Raschdorff, Haupt and Reinhardt.

There is good magazine material on Bramante, but no great monograph as yet. Monographs are needed to illustrate the work of many men: Vignola, Peruzzi, the second Antonio da San Gallo, Pietro da Cortona, Ferdinando Fuga, Galilei, who worked in England in the time of Wren, the Fontana and others. Vanvitelli is well shown in his monograph on the Caserta.

We should note Von Geymüller's *Ursprünglichen Entwürfe für Sanct Peter in Rom* (1875), Friedrich Arnold's *Der Herzogliche Palast von Urbino* (1857), Lambert's *Madonna di San Biagio près Montepulciano*, Percier and Fontaine's *Choix des plus célèbres Maisons de Rome et de ses Environs* (2nd ed. 1824), one of the earliest and best of the many books on "Italian Gardens"; Hittorff and Zanth's *Architettura Moderne de la Sicile*, with beautiful drawings of the architecture of Messina. Ruggieri's *Studio d'Architettura Civile* (1772) has splendid stylistic quality. Paravicini's *L'Architettura del Risorgimento nella Lombardia* should also be noted; and Beltrami's plates, which do all that is possible for the Certosa at Pavia. A splendid book is Magherini Graziani's *L'Arte a città di Castello* (1907) with fine coloured plates. Hakewill's *Picturesque Tour in Italy* has a

beautiful plate of the Ponte alla Carraia in Florence drawn by J. M. W. Turner.

A book which has become almost indispensable in the study of Italian architecture is the *Collana delle Cento Città d'Italia*, a monthly supplement to *Il Secolo*, published by Edoardo Sonzogo, of Milan, in 1887—a commonplace affair in appearance, but an encyclopædic work. Anderson's *Architecture of the Renaissance in Italy* is a general guide to all this study.

The French mind is essentially logical and architectonic. It is not fundamentally creative. Since the publication of Rivoira's book, we know, as we have always suspected, that even French Gothic came out of Italy. The impulses in art have always been Italian. To discipline these influences, to make them structural and organic, has been the duty of France. This architectonic power of the French builder makes a strong appeal to the American mind, which, without racial relationship, has become similar in temperament.

The Avery Library contains almost without exception the superb body of books which illustrate the supremacy of France in the world's architecture. We can only recall to the reader an occasional title. In entering the study of early mediæval architecture in France an excellent guide is Kingsley Porter's *Mediæval Architecture, its origin and development*, 2 vols., 1909. Resting upon Rivoira Mr. Porter has cleared up many misinterpretations of long standing. There is abundant material on the Gallo-Roman period; Lenoir's *Statistique Monumentale de Paris* begins here, and its superb plates in two volumes include all the early monuments of that city. Enlart's *Manuel d'Archéologie Française*, Courajod's *Leçons professées à l'Ecole du Louvre*, Mâle's *l'Art religieux du treizième siècle* (1902) and his later volume *l'Art religieux de la fin du moyen âge* (1908), and other similar works, discuss the principles of mediæval architecture. Viollet-le-Duc follows with his long series, especially the *Dictionnaire raisonné de l'architecture française* (1854). In the region of fine illustration we have the extraordinary work of Baron Isidore Taylor (1789-1879), *Voyages pittoresques et romantiques dans l'ancienne France* (1820-78). Our

set consists of 20 great folio volumes. Taylor was assisted by nearly all the clever mediævalists and lithographic draughtsmen of his time. As a collection of lithographs his work is valuable, individual plates often bringing large prices on the quays. The book holds the same relation to the mediæval architecture of France that Piranesi holds to the architecture of Rome: full of inspiration, and at the same time splendidly informing.

For the orderly statement of facts one goes to the *Archives de la Commission des Monuments Historiques*, and the great monographs on the cathedrals, Lassus and Viollet-le-Duc; *Nôtre-Dame de Paris* (s.d.); *La Cathédrale de Chartres*, published by the Ministère de l'Instruction Publique (1868); Durand's *l'Eglise Nôtre-Dame, Cathédrale d'Amiens* (1901-03); *Notice Historique sur la cathédrale de Reims* (1902). But the material on mediæval French architecture is limitless. The same is true of the Renaissance, with Pfnor's books on Anet and Fontainebleau, Vitry's *Hôtels et Maisons de la Renaissance Française*, Sauvageot's *Palais, Châteaux, Hôtels et Maisons de France*, Berty's *Renaissance Monumentale en France*, the splendid first series of the *Archives des Monuments Historiques*, and many others. We are quite as rich in the later French work from Louis XIV. on; all the great books are here.

As a part of our plan for making adequate provision for the Department of City Planning we have paid special attention to the topography of Paris. In the city itself the resources of the Hôtel Carnavalet and other centres are incomparably rich, but out of Paris, and certainly in America, nowhere else may the old city be so adequately studied as in the Avery Library.

To give a satisfactory impression of the Library it has seemed necessary to notice the collection at several most important points. We might go much farther with quite as much thoroughness. The architecture of Great Britain, Germany, the Low Countries, Russia, and the various interesting regions of the Far East are treated in the same thorough way. The splendid liberality of the Avery family has created for the architects of New York a professional library which is in every way adequate.





FISH POND, BRICKWALL, NORTHAM.

REVIEWS.

THE GARDEN.

Gardens in the Making. By Walter H. Godfrey. With illustrative designs by the Author and Edmund L. Whitten. 80. Lond. 1914. 5s. net. [B. F. Batsford, Ltd., 94 High Holborn.]

After a long period of oblivion we are now re-awakened into consciousness of things of beauty. Industrialism too long has monopolised our energy and obscured our vision. To merely serve material ends no longer satisfies the rational being. This is evinced most clearly in contemporary publications. Every branch of art is now exploited, and if commercial products are too much in evidence, these but reflect the general æsthetic interest.

The present volume will find acceptance. It is an architect's book, the fruit both of past experience and present practice. The author presents the subject in a new and useful aspect. He shows that though the architect considers house and garden as a congruous whole, the garden should be regarded as a thing apart. Its personality is much more vivid and variable than the house it frames. A garden responds to every change of hour and season. Advancing years affect it like a sentient being, with whom association may develop the warmest intimacy.

The claims of a garden are as exigent and as necessary as those of living beings dependent on us. He who will be happy will not ambitiously enlarge his bounds beyond the limits of his own endeavour. The small garden responds most sympathetically to

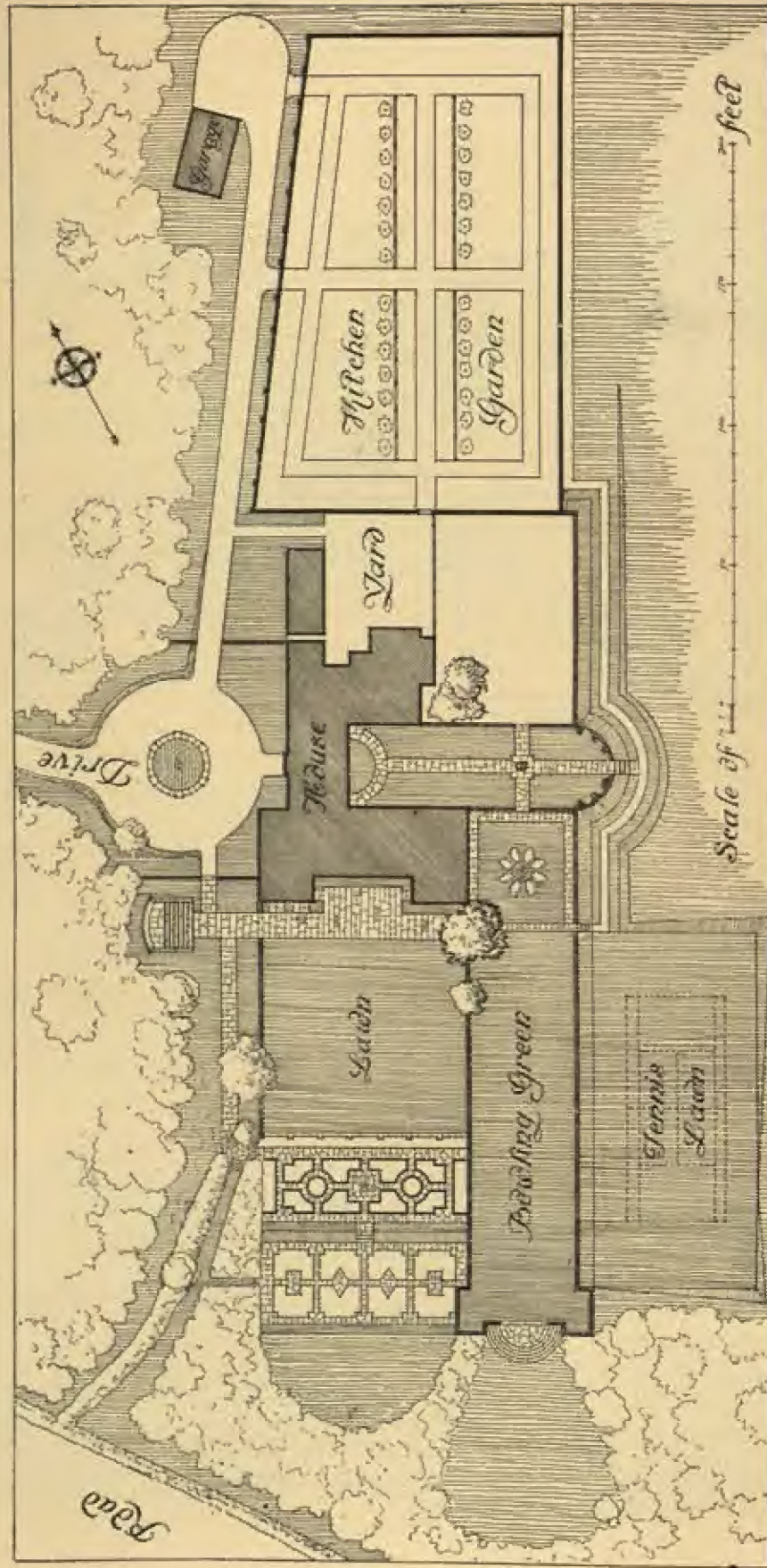
human contact, and the most beautiful effects almost entirely result from individual effort. There, where every flower and shrub are disposed with forethought, the whole arrangement bespeaks personal knowledge and companionship. The labour of design is almost inconsequent compared to the tender solicitude exacted in its development. It is the touch of the craftsman which gives the garden its charm.

The large garden is another matter. It holds aloof from personal affection. Its formality proclaims regard for display and ceremony.

Mr. Godfrey has chosen for his present book the garden of moderate size, such as can be tended with limited assistance. Numerous plans awaken a sense of beauty and suggestion; the sketches are of less account.

The author does not discourse upon ideals or theoretically perfect types. He presents definite schemes and problems he himself has solved, and some of the practical and æsthetic influences which lent them form and brought them to finality. Here skill and ingenuity are displayed and familiarity with the best traditions of design.

The garden which frames an English home must share with the house in the qualities which distinguish our domestic life. Formal design can be mastered in the studio, but the design of house and garden, if it be imbued with delicacy, results from subtle intuition. It connotes taste, refinement, culture, and an abiding love for all that is appropriate and beautiful. The problem of garden design is not, indeed, a mere ques-



DALVINGRIDGE PLACE, WEST HOATHLY.

tion of æsthetics. The arts in their innumerable manifestations respond by action and interaction to the whole range of human emotions. Yet were architecture to fail in being practical it could not long endure. The house, the site and its environment, the predilections of those we work for, at times an embarrassment, may inspire creative efforts; and the very restrictions and difficulties thus encountered may define the way when insistently pursued.

Traditional expression seems natural to design, and if its terminology be understood, and unaffectedly employed, it will assuredly serve our needs. Each age adds something of its own to the sum of human knowledge, and, dying, leaves its heritage to those who follow. Thus endowed the architect matures his scheme; in turn the craftsman's labour brings it into being; but both are powerless unless omnipotent Nature transfuses it with life.

HERBERT WIGGLESWORTH [F.].

Books received.

- Gardens in the Making.* By Walter H. Godfrey. With illustrative Designs by the author and Edmund L. Wratten. So. Lond. 1914. 5s. net. [R. T. Batsford, Ltd., 94 High Holborn, W.C.]
- The London Building Acts: A Handbook for the Use of Architects, Surveyors, Builders, etc.* Containing the full text of the Acts, together with the current By-laws, Standing Orders, and Regulations of the London County Council, the Corporation of the City of London, etc. Fifth Edition. By Banister Flight Fletcher, F.R.I.B.A., F.S.I., Barrister-at-Law, and Herbert Phillips Fletcher, F.R.I.B.A., F.S.I., Barrister-at-Law. So. Lond. 1914. 10s. net. [R. T. Batsford, Ltd., 94 High Holborn, W.C.]
- Dilapidations and Fixtures.* A Text-book in tabulated form for Architects, Surveyors, &c. Seventh Edition, revised and largely rewritten by Banister Flight Fletcher, F.R.I.B.A., Barrister-at-Law, and Herbert Phillips Fletcher, F.R.I.B.A., Barrister-at-Law. So. Lond. 1914. 6s. 6d. [R. T. Batsford, Ltd., 94 High Holborn, W.C.]
- "Country Life Library of Architecture."*—Small Country Houses: Their Repair and Enlargement. Forty Examples chosen from Five Centuries. By Lawrence Weaver. 4s. Lond. 1914. 15s. [Country Life, 20 Tavistock Street, Covent Garden.]
- London Survivals: A Record of the Old Buildings and Associations of the City.* By P. H. Ditchfield, M.A., F.S.A. With 114 illustrations by E. L. Wratten. Sm. 4s. Lond. 1914. 10s. 6d. net. [Methuen & Co., Ltd., 36 Essex Street, Strand.]
- Lectures on Housing.* The Warburton Lectures for 1914. By B. Seebohm Bowdree and A. C. Pigion. [Manchester University Lectures.] Sm. 8s. Manchester: 1914. [Sherratt & Hughes, 34 Cross Street, Manchester; 33 Soho Square, W.]
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- Shades and Shadows,* with applications to architectural details, and exercises in drawing them with the brush and pen. By Wm. R. Ware. 4s. Scranton, 1913.
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- Upper Norwood Athenæum.* The Record of the Winter and Summer Archaeological Rambles, 1913. Vol. 37. Edited by Theophilus Pitt, F.C.S. For private circulation.
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Trade Publications.

Garden Ornaments: Lead and Stone Figures, Vases, Old Wrought-Iron Gates, Garden Temples, &c., collected by Messrs. Thomas Crowther & Sons, 232 North End Road, S.W. A Series of Photographic Illustrations, with Introduction by Lawrence Weaver.

REGISTRATION BY CHARTER.

The Council's Proposals: Discussion at the Adjourned Special General Meeting, 8th June.

The Special General Meeting, adjourned from the 27th April,* to consider the Council's proposals for a new Charter and By-laws to give effect to the Resolution passed by the General Body on the 5th January last,† took place on Monday, the 8th inst., following the Business Meeting held on that evening.

THE PRESIDENT, MR. REGINALD BLONFIELD, R.A., in opening the debate, said: At our last meeting we disposed of Clauses 1 to 7 inclusive, and we start this evening at Clause 8. Before we go to that, there is one matter that I should like to call attention to. It has been suggested to me that perhaps we are not quite formal enough in our methods, and that the mover of a resolution or an amendment has the right to the last word in reply. In order that there shall be no doubt when this opportunity occurs, I propose, when the sense of the meeting shows that the matter should be put to the vote, to call on the mover of the resolution or amendment to reply, and after that the matter will be put to the vote without further debate. Before calling upon Mr. Stanley Peach to move Clause 8, I will ask Mr. Sylvester Sullivan to put the questions of which he has given notice.

MR. SYLVESTER SULLIVAN [A.]: These are questions of general interest to the Institute, their object being to elicit information which will be useful to members in considering the points which are before the meeting. Since the meeting of the 1st December we have had no further information as regards the position of the Allied Societies, and therefore I would like to ask these questions—viz. :—

1. Have the Council any reason to believe that the opinions of any of the Allied Societies have changed since the last meeting?
2. Have the Council received any letters from the Allied Societies that should be published or communicated to the Institute through its JOURNAL?
3. Is it clear that Mr. Murray's letter of the 31st December last represented the attitude of the Royal Institute of the Architects of Ireland either then or now?

THE PRESIDENT: With regard to the first question, letters from the newly elected President of the Royal Institute of the Architects of Ireland, together with reports received of recent meetings of that body, appear to indicate that the Royal Institute of the Architects of Ireland is now undecided in its attitude towards the alternative policies, "Charter" and "Bill." We have no reason to believe that other societies have changed their minds. That is the answer to the first question, and it covers also the third. With regard to the second question, the answer is: All communications from the Allied Societies are addressed to the Council, and receive their very careful consideration. The Council will publish any information which they think will be useful to members. What we are now considering, however, is the action to be taken by the corporate members of the Royal Institute of British Architects. I will now call upon Mr. Peach.

MR. C. STANLEY PEACH [F.]: Clause 8 as printed on the paper reads: "Representation on this Standing Committee and for the specific purposes only as defined in Clause 7 to be given to Licentiates. In all other regards the constitutional position of the Licentiates to remain as at present." The Council suggest, as an amendment to that Clause, to insert after "Licentiates" at the end of the first sentence the words "and registered architects not being corporate members or Licentiates." That amendment is suggested because at the

* See report of Discussion, JOURNAL, 9th May, pp. 429-438.

† "RESOLVED, That the Council be hereby authorised to prepare, and to submit for the approval of the General Body, a Petition for presentation to the King, praying his Majesty to grant a new Charter, containing such further privileges and powers as are required to promote effectively the advancement of Architecture by enabling the Royal Institute of British Architects to register and to distinguish persons qualified to practise."—JOURNAL, 17th January 1914.

last meeting several members indicated that it would be desirable that registered architects who were neither corporate members nor Licentiates should have some representation on the Council for registered architects. I beg to move that that Clause be adopted as amended.

MR. GEORGE HUBBARD seconded.

MR. HERBERT SHEPHERD [A.]: If the meeting were to accept the amended Clause, it would bind itself to something contrary to what the last meeting agreed to. Therefore I suggest to Mr. Peach that he amend the resolution to accord with the expressed wish of the last meeting.

THE PRESIDENT: That was the intention.

MR. HERBERT WELCH [A.]: At the last meeting the words "Standing Committee" were changed to "Board" or "Authority."

THE PRESIDENT: The suggestion was made, but the exact title—whether "Board" or "Authority"—was not settled.

MR. S. DOUGLAS TOPLEY [A.]: Is it necessary to say "Corporate Members"? Those connected with the Institute are referred to as "Members or Licentiates," and it would be better to retain that term.

THE PRESIDENT: I would point out that we are not here to discuss the precise terminology, but the substantive facts of these proposals, and it would be better to leave such matters for our legal advisers to settle. I will now put the Clause as amended by Mr. Peach.

MR. TOPLEY: I have an amendment to propose—viz., that this Clause 8 be referred back for further consideration. I am not expressing opposition to the spirit of the clause, but it is clear, from the short discussion that we have had in the last few minutes, that we do not know where we are. We are all agreed that this is a most serious matter, and what we are anxious to secure is a settlement of a question which has agitated the profession for many years. I think it would be a great mistake, in view of the wide misunderstanding which is abroad in regard to this matter, to pass it hurriedly this evening. When this document, based upon Sir Aston Webb's amendment, was first published, we were agreed that the Council had arrived at a sensible and sane solution of a very difficult problem. But at the last meeting, when this document was considered, our satisfaction passed through various stages, first contentment, then doubt, then suspicion, and to-night we are in a position of positive alarm; we do not know where we stand. Several amendments were suggested, and I will not question the wisdom of those amendments—I am not discussing them—but surely the fact that members of the Council thought it well to move amendments is sufficient evidence that the matter has not been well considered. The Associates, for whom I speak, desire to assist towards giving effect to the policy to which we are now committed. We are not satisfied that these proposals are the best way of forwarding the policy of the Institute. Many of us are in the extremely unpleasant position of acting as obstructionists; we cannot help that; we are forced to it, and we do not think those who have forced us into the position. We are anxious that the best may be extracted from the policy adopted by common consent. Therefore we want the Council to take this back and consider it further. I now move that Clause 8, as amended, be referred back for further consideration.

MR. ROBERT J. ANGEL [A.]: I rise on a point of order. It is the custom in debate that an amendment cannot be moved to an amendment. I am expressing neither approval nor disapproval of the last speaker, but the right method is to put to the vote the amendment which has been moved by Mr. Peach, and when that matter has been decided another amendment can be moved.

MR. WM. WOODWARD [F.]: In my judgment, this is no amendment at all in the proper sense of the word. What is before us is the proposal to pass Clause 8, with the insertion of the few words suggested by Mr. Peach. It is not an amendment.

MR. MAX CLANKE [F.]: Any alteration in the document which has been printed is an amendment, and it is according to the rules of debate that the amendment be put first and voted upon.

THE PRESIDENT: I believe that Mr. Angel is technically right, and that the clause should be first formally moved as

printed. I will therefore ask Mr. White to move it, and somebody else to second it. Then, if you wish, we can proceed with the amendment.

MR. W. HENRY WHITE [F.] moved, and MR. J. S. NAYLOR [A.] seconded, Clause 8 as printed.

MR. PEACH: I move as an amendment to Clause 8 the insertion of the words "and Registered Architects not being corporate members or Licentiates" at the end of the first sentence.

MR. ADAM WATSON [F.] seconded.

The amendment was put from the Chair and lost on a show of hands.

MR. TOPLEY: I move that Clause 8 be referred back for further consideration.

THE PRESIDENT: Will you give us some indication, Mr. Topley, on what ground this is to be referred back?

MR. TOPLEY: I ask the meeting to refer Clause 8 back because it has obviously not been properly considered. I say "obviously" because among other reasons Mr. Peach himself has moved an amendment altering the proposition of the Council. On former occasions we have had appeals addressed to us to support the recommendations of the Council; we have been reminded that they are our duly elected representatives and comprise some of the ablest men in the country. We are quite willing to support the Council whenever possible, but why should we be the only ones who are to support the Council? I think I have shown sufficient reasons why this clause should be referred back. It has not been considered properly; and even if it had been considered exhaustively by the Council I submit, with great respect, that we are not in a position, nor have we proper information, to form a comprehensive opinion on the important matters we have before us. It is clearly a matter for further consideration, and I now move that it be referred back to the Council for further consideration.

MR. HORACE W. CURTIS [A.]: I would like to second this amendment. It seems to me the reasons for it hardly need mentioning. I understood that Mr. Peach's amendment was moved on behalf of the Council, and that shows, as Mr. Topley has suggested, that the Council have not given the consideration to the document which would enable them to view it in its full perspective. Mr. Peach's amendment, which, I take it, represents the views of the Council, has been now put forward and lost. Surely it would be in the interests of the Council themselves to take this matter back for reconsideration.

MR. STANLEY PEACH: I beg to oppose this amendment. I think Mr. Topley can hardly remember what took place at the last discussion. When the President put this matter before the meeting for the general consideration of members he explained very carefully and fully that these proposals were of a tentative nature, an attempt to meet the very difficult question of registration in the best way that it could be met at the moment, as the chance of a Bill in Parliament seemed very remote. In view of the tentative character of the proposals, members were invited to consider them fully and to make certain suggestions. Those suggestions were made, notes were taken of them, and the Council promised to consider them, which they have done. As the result of that consideration the amendment which I proposed, to include Registered Architects or representatives of Registered Architects on the registering authority, was put forward this evening. Mr. Topley and Mr. Cubitt say that that is evidence that the Council have not considered the matter. But the Council have most carefully considered the matter from the commencement, and the inclusion of Registered Architects by representation was not put forward in the first instance simply because it would unduly complicate the matter for consideration. There is a general impression, as appears from the discussion, that there are a vast number of unregistered architects who may be roped into the Institute under this scheme. That, according to the evidence before the Council, is a misapprehension; there is nothing of the kind. But if it should turn out, as it sometimes does, that this large number of practising architects whom nobody knows, exists, the Council thought the suggestion that those men should have some representation on the Board was a reasonable one, and

they adopted it. So far from this being evidence that the Council have not considered the matter, it is evidence that they have considered it fully. Therefore, I oppose the amendment, and I hope the members will support the Council in the matter.

MR. WOODWARD: There is one other point which I think the meeting might take into consideration, in the interests of the whole profession, and that is, that if this Institute can by any means get these architects who are not under any control under some sort of control by registration, it would be for the advantage of the profession as a whole, and would give added prominence to the Institute which it would otherwise lack.

A MEMBER: It is one thing to get them on the register, and another thing to give them power when they are there.

MR. NENDHAM WILSON [A.]: I venture to think that Mr. Topley and his supporters have not yet given any cogent reason for referring this clause back. At the same time I feel bound to support this amendment, because, giving all possible weight to what Mr. Peach said that these proposals are tentative, if I may say so, I think this particular clause is a little too tentative, and that we should like further information. For instance, there should be some further consideration of the proportional representation which should be given to these Licentiates and Registered Architects. We are now dealing with a Board, and not with the Council.

THE PRESIDENT: No. In order that there may be no misunderstanding about this, the Council have certain proposals to make with regard to Clause 9. I must differ entirely from Mr. Topley's statement that the Council have not given due consideration to this matter. They have given it most careful and anxious consideration. In point of fact, the amendments which they have introduced into their considered proposals were entirely due to the debate at the last meeting. The Council have been so anxious to keep in touch with the feelings of the members and their legitimate objections to the proposals that they have modified their own proposals to meet them; and it is a very ungenerous thing to say that the Council have not given due consideration to these proposals.

MR. G. A. T. MIDDLETON [A.]: It is unfortunate that these proposals were not issued to members, so that we might know where we were before we met to-night.

SIR ASTON WEBB, K.C.V.O., C.B., R.A. [F.]: As Mr. Topley has told us, we are here to-night to try to come to some decision on this matter. There may be some verbal alterations and some slight additions to be made. I understood when these proposals were brought before us at a previous meeting that we were to try to decide on general principles, and that the exact wording of the clauses would be brought up for us to consider later on. I have not gathered from what has been said—and I have been listening for it, and should vote for anything which seemed to be fair and reasonable—that any definite suggestion is put forward against this proposal, which is that in all other regards the constitutional position of the Licentiates shall remain as at present. The clause means that they are to have certain representation on the Board or Authority, but otherwise the Licentiates are to remain in the same position as before. That seems a perfectly clear proposition, and we either agree or disagree with it. If there are additions or amendments to be made to that, they will be made and will come up and be discussed later on. But surely we, as reasonable men, can decide on that simple proposition, that Licentiates shall have representation on the Board, and that in other respects they remain as before. That is what we have to vote upon. Therefore why should we refer it back? If you do not agree with it, vote against it. But surely you do agree; you all agree. ("No!") Why not? Mr. Topley is a reasonable man, so am I. What does he want instead? That is what I cannot see. I cannot see that there is anything between us. We want to get on and get this thing through. It has interfered with the work of the Institute for years, and surely a small thing of this sort need not stop the whole proposal. Will Mr. Topley say what alteration in principle he wishes? Because we are voting to-night on a principle, and not on little verbal alterations.

MR. EDWIN T. HALL [F.]: I am not a member of the Council,

and therefore can speak with perfect freedom. But I have been listening with the greatest care to hear what it is that has to be referred back, and upon my life I have not gathered. The clause is to be referred back, but with what object? When a clause is referred back, an indication is given as to what alteration is desired. I have listened twice to Mr. Topley, but have not gained that information. Do those who oppose this clause object to Licentiates being on this Committee at all? Do they object to the constitutional position of the Licentiates remaining as it is? If they would give a direction, I could understand that the Council might think it over and deal with it, but unless they have some suggestion as to what it is that is taken exception to, I confess that if I were on the Council I should find grave difficulty in reconsidering the subject. And, as Sir Aston Webb has said, we are here to deal with principles. If the principle is that they do not want to have Licentiates represented on this registering body, say so, and then the Council can consider it.

MR. BISHOP [A.]: Sir Aston Webb says that this matter is coming up for discussion again? I understood you to say, Sir, that it was not, that it would go straight to the Privy Council after the Institute Council had gone through it.

THE PRESIDENT: The actual wording of the Charter will have to come back to this meeting after we have discussed it with the Privy Council.

MR. BISHOP: But we cannot amend it afterwards.

THE PRESIDENT: After we have discussed it with the Privy Council it will come back again to the General Body.

MR. BISHOP: Then it will not be passed by the Privy Council before it comes up again?

THE PRESIDENT: This meeting will have the opportunity of considering it again.

MR. MAURICE B. ADAMS [F.]: If I may intervene for a moment I would like to say that I was one of those who advocated—and still advocate—that Licentiates must have representation. But whether it is to take this particular form or not is another matter. And one reason why I voted just now against Mr. Stanley Peach's amendment was that I thought the procedure did not give Mr. Topley quite the fair chance that he should have had, although I bow to the decision of the Chair, inasmuch as that was the way in which the clause in question should be put. But I am assured that Mr. Topley and those associated with him are as anxious as any of us that we should arrive at some appropriate conclusion. We must give these registered people, whoever they are, some sort of tangible representation. I suggested it should be apart from the corporate members, because it seems to me you are mixing up a private society's business with a public affair, and it is difficult to ascertain where the interests of the private society end, and where the interests of the public come in. In the interests of the public all architects, it is said, ought to be registered, so that, I take it, all may be sure of their being "properly qualified persons." I have never been an advocate for registration—I have my doubts about it even now—but at the same time this Institute has decided and taken upon itself the task of promoting registration. As to whether it should be by Charter or by Statute the Council does not appear to have come to a conclusion. If the Charter will suffice—and perhaps it may—I am satisfied. But in the present state of affairs we are uncertain where we stand. If we can come to-night to some proportionate conclusion to meet Mr. Topley's objection and the objection of the Associates who are behind him, I think with Sir Aston Webb that it would be a very great thing to do. We may go on talking until Doomsday and yet never arrive at a practical conclusion unless we take the bull by the horns and treat it in this practical way. The Licentiates must have representation, or the Privy Council or Parliament will not pass our scheme. You have thought it worth while to ask them to join the Institute; they are paying members, and therefore they ought to have some sort of representation. Undoubtedly this is the right thing to do, and I agree with what has fallen from Sir Aston Webb, that we have not heard what Mr. Topley's precise difficulty is. I should be inclined to say that it would be a good thing to put representatives on this Registration Board; they would be a very small proportion of the Board, and

their influence would be proportionate. Cannot we arrive at some equitable conclusion with regard to this proportional representation, and see that the Associates' interests are not overridden in the way that some seem to anticipate?

MR. STANLEY PEACH: In connection with this proposal to pass Clause 8, it has been suggested that I should call your attention to Clause 9, which gives the number of the different classes who would be represented on the Standing Committee or Board, or whatever the registering authority is. By Clause 9 you will see that the total number of members of the Committee is not to exceed twenty-one, in the proportion of ten Fellows, seven Associates, and four Licentiates. And as you have rejected my amendment to add any representation for Registered Architects, Clause 9 will be put to you later on as it stands. Therefore, in passing Clause 8, you know from Clause 9 exactly what the Council proposes as to the composition of this Standing Committee; and unless there is some fundamental objection in principle to Clause 8, I hope the speeches which you have listened to will convince you of the reasonableness of this clause, and that it will be now passed.

MR. HERBERT SHEPHERD: Mr. Peach puts it to us as a matter of principle this question of representation on the registration authority. I suggest to you, as a matter of principle, that if you are going to put a number of men upon a register, you must give them representation in accordance with their numbers. ("No!") Yes, on a common register you must. We are not talking about qualifications; we are talking about men who are qualified to practise architecture, without any professional and personal qualification or distinction being stated as between one man and another; we are all there on one common ground. The clause as now proposed by the Council is that senior members of this particular corporation, who only number practically half the junior members, are to have, as a matter of principle, nearly double the representation. I am speaking only about the register. That is utterly wrong in principle.

MR. GEORGE HUBBARD, F.S.A. [F.]: I should not like the meeting to be left under the impression which must be on their minds after what has fallen from Mr. Shepherd. Surely, if the Privy Council approve of the proportional representation provided in Clause 9, that would be the working basis of the representation on the Board. It would not have to follow the suggestions made by Mr. Shepherd that it must be a proportional representation. If you get the approval of the Privy Council, that is all that is required.

THE PRESIDENT: I think I ought to say that the Council suggest, with regard to Clause 9, that the Committee consist of ten Fellows, seven Associates, and six Registered Architects, of whom at least three should be Licentiates. You will recollect that at the last meeting a considerable point was made about what was called "the extra-mural architect," and it appeared to us to be a sound point that those men who are not Licentiates or Fellows should have some sort of representation, and this proposal was put forward to meet that case. I do not want to enter into a controversial argument, but I tell you that so that you may know what was the full intention of the Council in suggesting certain amendments as the result of the last meeting, and they proposed this amendment to Clause 8, which you have already voted against, and supplemented that by the alteration of Clause 9 which I have just mentioned.

MR. HALL: One word about Mr. Shepherd's suggestion. I am sure Mr. Shepherd can hardly have thought out carefully what his proposal is, because if he means that there is to be proportional representation, it would mean, conceivably, that a lot of Registered Architects might come in who are not members of the Institute at all; they might conceivably exceed in number the members of the Institute. Therefore, if he means that there should be proportional representation, these Registered Architects would govern this body. Surely that is not what the Associates want?

MR. G. L. ELKINGTON [A.]: Might I put in a plea with Mr. Topley that he should withdraw his amendment? The reasons he advanced in its favour have, I think, been disposed of by the speeches which have been made, not only by the various speakers in the room, but also by the statement

from the Chair that the matter has received the most earnest consideration of the Council. I confess I am considerably surprised that Mr. Topley should have been willing to put forward this amendment on such feeble grounds, when I remember that at our last meeting he was defeated on an amendment of which the motive, I claim, was similar to that he now puts forward. In the former case the danger to the Institute was obvious; in the present, it is more obscure, but nevertheless existent. I ask him to withdraw it on that ground. Another body at the present time is meddling with registration for architects, and it seems to me indispensable that this Institute should move on the lines which we have definitely settled upon as soon as, and as quickly as, possible. The effect of any amendment to refer the matter back will not only delay the Institute in carrying into effect what we have agreed to do, but may place us at a disadvantage in dealing with the pretensions of this other body. That is a consideration which may not appeal to Mr. Topley, but I say that it is a consideration which should be present in the minds of every Associate here when he votes upon this point. It is essential that should not be lost sight of, and that a decision be come to to-night.

MR. L. R. GUTHRIE [A.]: Mr. Peach just said that Clause 9 would be put as printed here, but I understood you to say, Sir, that it would be as amended by the Council.

THE PRESIDENT: I meant that had Clause 8 been carried as amended by Mr. Peach, the Council would have proceeded to put to you Clause 9 in the altered form.

SIR ARTHUR WENK: Unless Mr. Topley objects to Licentiates being on the Board at all—I do not gather that he does—the question as to the proportion of representation comes in the next clause, Clause 9. This is merely to enunciate the fact that Licentiates should have representation. It might be increased or reduced. But surely he does not propose that they should have no representation at all?

MR. F. R. HOBBS [A.]: I have heard no adequate reason yet for referring back this clause, and it is ungracious, I think, to suggest its being referred back in view of the fact that the Council have made suggestions for its amendment to meet the criticisms made at the last meeting. It seems obvious that Licentiates should have representation, and unless Mr. Topley can show more adequate reason for its being referred back, I hope that the clause will be passed.

MR. SHEPHERD: I would like to point out to Mr. Hall, and so as to make it absolutely clear to this meeting, that I made no proposal, or suggestion of a proposal; I simply put it on a basis of principle.

MR. HALL: Hear, hear.

THE PRESIDENT: I must ask the meeting to give us some guidance if it decides to refer the clause back for further consideration. Does Mr. Topley wish that no representation on this Board or Authority shall be given to Licentiates and Registered Architects? I should like to have a clear and definite answer. Otherwise, we shall not have the slightest idea what is the meaning of this resolution to refer back, or why we are to reconsider it.

MR. TOPLEY: At the commencement of my remarks I laid it down clearly that I was not opposed to the principle of this clause. In the subsequent discussion members have spoken of representation. That will come up when we deal with the next clause. Opinion amongst Associates, as far as I can gather, is very much divided on this question of representation of unattached architects. In my opinion the Standing Committee or Board, an advisory body, should be composed of representatives of all those architects on the Register in strict proportion to the numbers on the Register. If there are three times as many unattached members on the Register as there are of this Institute, there should be three times as many on the Standing Committee. ("No, no.") At the last meeting we protected the interests of this Institute by laying it down that the Standing Committee should have no executive power, but that it should be an advisory body. If it has executive power the majority of its members must be R.I.B.A. members, if it is an advisory body it should represent those whose interests it has to watch. With all respect to Mr. Peach I cannot accept his figures as to the few unattached

architects there are, for there are more architects practising outside this Institute than there are members of it, and I base that statement on figures which have come to my notice, and which I have reason to believe are correct. This question of representation should be fully discussed when we reach Clause 9. My object in asking the meeting to refer this matter back is because I am satisfied, with deep respect, that it has not been sufficiently considered. I have not said, as some have misinterpreted it, that it has been carelessly considered. I do not doubt that in so far as is possible the Council have given earnest thought to the matter. These proposals are based on a compromise devised by Sir Aston Webb and adopted late in January. They have only considered this scheme since then, and it is obvious that the time is insufficient for them to have produced the last word in this matter, which is proved by the amendments moved by members of Council. Mr. Peach said that he has only moved amendments rendered necessary by wishes expressed at the last meeting. With all respect to Mr. Peach, that is hardly accurate. Mr. Peach, according to the published report in the *JOURNAL*, moved to omit the words "in all other regards the constitutional position of the Licentiates shall remain as at present." That had no reference to any expressed wish. We have heard nothing about that since.

MR. PEACH: If Mr. Topley recollects, I moved that on my own, and not on behalf of the Council. It was my motion that those words should be omitted, and I gave the reasons. I particularly said that I made the amendment on my own account.

MR. TOPLEY: Yes, but Mr. Peach thought it necessary to make it, and he gave the reason, that the hands of the Council were to be completely tied. To-night it does not seem to matter whether their hands are tied or not, and if it does not matter to-night, why did it matter last time? I do put it to this meeting that the thing has not been sufficiently thought out yet. The Institute now has in its hands power to mould a policy which shall bring peace to our profession. Mr. Elkington made an appeal that I should withdraw the amendment. I shall not do so. Let the meeting decide. I do not admit that the Institute has been running a race with the Society of Architects. They have had great ambitions, but their Bill will come to nought, it is bound to. We have been told it is not the proper time to promote a Bill in Parliament, that a Bill stands no chance. We have accepted that. If the Institute cannot get a Bill through, how can the Society of Architects do so? There has never been any question of competition between the Institute and the Society of Architects. There never has been competition between them. We should not regulate our conduct in regard to any action which they take, and we need attach no importance to what they are doing. There is no necessity for the Institute to think of it. If we let this proposal go without further consideration by the Council, we shall be making a mistake.

MR. WOODWARD: On a point of order, may I suggest to Mr. Topley that he has not in the slightest degree answered the specific questions put to him?

THE PRESIDENT: I understood Mr. Topley did answer the question. He said he was prepared to accept proportionate representation, and, if necessary, three times as many outsiders as there are members of the Institute on this Board or Authority. I will now put the question to the vote: That Clause 8 be referred back to the Council for further consideration.

On a show of hands there voted for the amendment 122; against, 107. The amendment was then put as the substantive resolution and carried.

MR. STANLEY PEACH: In the face of that resolution, I think it would be useless to discuss the remaining clauses. I beg leave therefore to move the adjournment of the meeting.

MR. HUBBARD seconded.

MR. ALEXANDER N. PATERSON [F.]: I have travelled 800 miles to assist in the discussion of Clause 10, and I strongly deprecate adjournment. I move that Clause 10 be discussed.

MR. ADAM WATSON [F.] seconded.

Mr. Paterson's motion was put to the meeting as an amendment and carried.

MR. STANLEY PEACH: I find some difficulty in moving Clause 10, because the constitution of the Council must to a great extent depend on other matters which are dealt with in the general Charter propositions.

MR. BERNARD DICKSEE [F.]: On a point of order, we have not yet had Clause 9. Surely it is open to members to discuss it, so that there shall be some recommendation, and that it should not go back in an empty fashion. I should like to have moved an amendment to that Clause. I feel that nine-tenths will disagree with Mr. Topley.

THE PRESIDENT: Mr. Topley's proposal was to refer Clause 8 back to the Council for further consideration, and Clause 9 is really included in Clause 8. It is impossible to discuss it in view of the amendment which has been carried.

MR. STANLEY PEACH: The proposal is that the Council shall consist of one President (a Fellow), 4 Vice-Presidents (Fellows), 1 Honorary Secretary (Fellow), 5 Chairmen of Standing Committees (Fellows), 1 Chairman of the Board of Architectural Education (Fellow), 15 Ordinary Members (Fellows), 10 Associate Members, 2 Past-Presidents (Fellows), 1 Representative of the Architectural Association (Fellow or Associate), the President or other representative, being a Fellow of the R.I.B.A., of every Allied Society in the United Kingdom having not less than 50 of its members on the Register (or such other number as the Council may from time to time determine). Allied Societies having less than 50 members on the Register to be represented on the Council in rotation. The object of making this an exceptionally large Council, made very much larger than the present Council by the addition of a number of Presidents of Allied Societies, is to bring this central body, as much as possible, in contact with the Provinces. It has been felt for a very long time that if the Institute is to speak to the public with the voice of the whole profession, it is absolutely essential that the Allied Societies should be represented at the Council meetings, to express the views of the Provinces. And although we have notice of an amendment to this Clause, to reduce the representation of Allied Societies, the Council feel strongly that it is in the interests of the Institute that the Allied Societies should be represented here by their Presidents. With regard to the rest of the constitution of the Council, you will observe that increased representation has been given to the Associates, and that the Chairmen of Standing Committees are to be members of the Council. This latter is a very important addition, and its object is to co-ordinate the work of the Institute. Standing Committees are very important elements in its management, and it has been felt for a long time that their presence on the Council is desirable. I think the general composition of the Council, as proposed, will appeal to you, and I hope this Clause will be carried out.

MR. W. HENRY WHITE [F.] seconded.

MR. SYDNEY PERKS [F.]: I beg to move, in accordance with my notice, "That Clause 10 be referred back to the Council for further consideration, a revised clause to be submitted to the General Body at an early date—it being distinctly understood that the members of Allied Societies are not to have larger representation on the Council than our own Associates." I should like to correct Mr. Peach at starting. He gave the impression that this had been very carefully considered by the Council. He has made a mistake, because he was not there. The Council did not spend five minutes on this clause. I cannot explain why; but it was partly owing to a misapprehension. Ten of us signed an appeal for further consideration, and that was out-voted. But I myself have felt for years that the composition of our Council was unfair. I am not saying a word against the Allied Societies, I have nothing but praise for them; it is a great advantage for us to be always in touch with them and to give them encouragement. They do excellent work, too, in inducing their young men to enter for the Institute Examinations. I am heartily in sympathy with the Allied Societies, but let us come to a few figures. At present our Council of 42 members is too large. I have communicated with the Institute of Chartered Accountants, the Surveyors' Institution, the Institution of Mechanical Engineers, the Law Society, and the Institution of Civil Engineers, and asked them how

many members they have, and how many are on the Council. Briefly, the result is this: The Chartered Accountants have over 4,800 members, and a Council of 45, or 1 in 107. The Surveyors' Institution has over 5,400 members, and a Council of 38, a representation of 1 in 143. The Mechanical Engineers have over 6,300 members, a Council of 35, or 1 in 181. The Law Society have over 9,000 members, and 50 members of Council, or 1 in 181. The Institution of Civil Engineers has 9,193 members, and a Council of 35, or 1 in 262. Our Institute is 2,300 strong, and we have a Council of 42, or 1 in 54. Our Council at the present moment is altogether too large compared with these other bodies, which we acknowledge do their work very well. Mr. Peach's proposal is that there should be 25 "ordinary members," or rank and file, on the new Council; there are now 24. He will give our more seat to us, and that is an increase of 4.16 per cent. But you will see in our KALENDAR for this year that there are nine representatives of Allied Societies, and he proposes to make them 18, an increase of 100 per cent. for the Allied Societies, and only 4 per cent. increase for our own men. I have been very much amused in asking members what they thought our Allied Societies were; I found that, as a rule, they held very erroneous ideas. There is a popular idea that the Allied Societies are composed of men belonging to this Institute who practise in the Provinces, and that an Allied Society pays us a fee of so much per annum for the privilege of being allied to us. Another thing I have been told is that 75 per cent. of our members are in the Provinces, and form these Allied Societies, and that we should give them extra privileges because they are away from London and cannot use the Institute as we do. That is entirely wrong. The number of our men in the Provinces is about the same as the number in London; I have the figures from the Office, and find there is a difference of only about 200—1,055 town members, and 1,237 country members. But our members in the Provinces do not, as a rule, belong to the Allied Societies: over two-thirds of the members of Allied Societies are not our members; they are not qualified, they are not necessarily architects. I will give you the exact words from our KALENDAR. In one case they are persons engaged in artistic or collateral pursuits, or interested in the study of architecture; in another case they are gentlemen interested in the furtherance of the objects of the local societies. Take the Edinburgh Association: "Persons engaged in artistic or collateral pursuits, or interested in the study of architecture." The other which I quoted is the Hampshire and Isle of Wight Association: "Gentlemen interested in the furtherance of the objects of the Hampshire and Isle of Wight Association"! Mr. Peach's proposal is that you can have a Society of 50, perhaps less, gentlemen interested in architecture, not necessarily architects, and they can send a man up to take a seat on our Council.

THE PRESIDENT: They must be registered architects.

Mr. PERKS: But they need not be our members. There may be 49 men who are not members of the Institute, who have not passed our examination, and the whole lot of them do not pay a penny towards our funds. You have 1,700 Associates, and with 10 representatives on the Council you have only 1 in 170. The Associates pass through a very stiff examination, and are the backbone of the Institute. They contribute £3,000 a year to our funds, and yet you give them only 1 in 170 on the Council. Is it suggested now that every member of the Allied Societies must be a member of this Institute? ("No.") You can have 49 men not qualified who can send one qualified man on to our Council—a nice little pocket borough for someone! These Allied Society men do not pay us a penny, but they cost us about £500 a year, and about £100 a year towards the personal expenses of their Presidents when coming up to London to attend our Council meetings. If you carry this proposal you will double those expenses and be up against £100 a year more. There is another point of view. I am not saying a word in favour of putting Licentiates on the Council, nor against their being put on the Council—that point does not arise—but consider how grossly unfair this proposal is to the Licentiates. We invite men to become Licentiates, we impose a test or

examination, and over 2,000 men come forward and pass the test and become Licentiates, and pay us over £2,000 a year, and yet they are to have no representation on the Council. Yet 49 men who are not our members and pay us nothing, who have passed no examination, can send one member to our Council.

Mr. PATERSON: Does Mr. Perks maintain that there are no Licentiates in the Allied Societies? Is it not true that two-thirds of the Licentiates are members of Allied Societies, and would be represented by the Presidents of those Societies?

Mr. PERKS: I am glad Mr. Paterson has raised that point, because he is hopelessly wrong. The number of Licentiates in the Provinces is 1,293, and 442 only are members of Allied Societies. I simply plead for justice. I want justice for our own members, and if you have a Council which is composed of about one-third of the representatives of the Allied Societies, of men who do not necessarily represent our members, that Council will not be entitled to the respect it should have. Our members in the Provinces can vote exactly as we do. Take one Society—Northampton. That would come in every other year. Northamptonshire has about 25 members, and I think they have only two Fellows among them. Mr. Gatch comes forward as a Vice-President, and that leaves one man who might come forward to represent that Society on our Council. And if you pass this proposal you are arranging for a nice safe seat for one man. Is it fair that that man should come on automatically when 1,700 of our Associates have only 10 representatives on the Council? It is grossly unfair. I have laid down no hard-and-fast rule, and I do not say how many there should be on the Council, but I lay this down as a fundamental basis, that men who do not belong to the Institute should not have a greater representation than our own members.

Mr. TOPLEY seconded the amendment.

Mr. HUBBARD: I should like to remind the Meeting that the number of members on the Councils of other societies, such as the Surveyors' or the Engineers', has nothing to do with ourselves. We know what we want, and we expect to get it. I entirely disagree with the line of argument adopted by Mr. Perks. More than half the members of the R.I.B.A. and more than half the Licentiates are in the Provinces. It must be remembered that the Institute decided many years ago to improve its organisation so as to make it the truly representative body for the architects of the United Kingdom, not merely for those in London. It accordingly invited provincial societies to join the Institute as Allied Societies, and certain financial advantages and some representation on the Council were offered to make it worth their while to do so. We, in effect, invited these Allied Societies to join us. As the result, practically all the architectural societies in the country have accepted the leadership of the Institute. All the regulations and constitutions of these societies have been approved by the Council of the Institute, and no change can be made without its assent. If now those rules or constitutions are bad, we are at fault, because we have approved of them. The Institute has encouraged and assisted the formation of new societies in districts where the architects had no local organisation and no means of joint action. This policy is still being pursued by the Institute. In spite of this organisation, the geographical and other factors always tend to make the Institute rather a London society than a United Kingdom body. ("No, no.") You will see from my figures later on that that is so. Inevitably the meetings of its Council and Committees are almost monopolised by the London men, and the views and wishes of the provincial members, though they are the majority, do not get the same expression as do those of the London men. Now as to the numbers. At a normal meeting of the Council there are generally about twenty-five London men present, and, as a rule, about three provincial members. If the Council's suggestion is adopted of increasing their numbers, then we shall have probably in the future a normal Council meeting of, say, forty members, which would include six or eight provincial members. Surely that is not a very great proportion for the provincial members, who represent the majority of the practising architects allied to the Institute. Mr. Perks' argument that some of the Allied Societies contain only a few R.I.B.A. men is beside the point.

We want the Presidents on the Council not merely as representatives of the R.I.B.A. men, but as representatives of all the architects in their district, many of whom have no other means of making their wishes felt. What we need on the Council is not merely the voice of London, but the voices of Manchester, Birmingham, Liverpool, Glasgow, Newcastle, Portsmouth, Exeter, and the other great cities of the Kingdom, and of the districts of which they form the centres. We are, in essence, a democratic body, and we must not attempt to monopolise in London too many seats upon the Council. It is only fair and right that a liberal number of seats should be given to provincial members, because they form the majority. I have been on the Council for a good many years and can say that the Presidents or representatives of the Allied Societies who come to our Council meetings invariably give very great assistance. We have had a great number of distinguished men from the Provinces; I have all their names here, since 1910 or 1911. From Leicester we have had many able men. Their present representative, Mr. Hind, has been of great assistance. Mr. Goddard has been a useful man, and Mr. Perkins Pick has been of the greatest use to us—indeed, if I may be allowed to say so, he may be termed the "Pick of Leicester"! From Liverpool we have had Mr. Grayson, Mr. Arnold Thornely, Mr. Edmund Kirby, Mr. Thickness, and others. From Manchester we have had Mr. Worthington, Mr. Brook, and Mr. Beaumont, who have given the Council enormous assistance. Without these representatives from the Provinces, the Council would not have been able to carry on the work of this Institute in proper fairness to the country members. I might go through the whole of the Allied Societies and give the names of many able representatives, but I will not do that, and will conclude by saying that I hope this meeting will support the recommendation of the Council.

A MEMBER: Mr. Hubbard has said that at the Council meetings the voice of London is practically the only one. But provincial members vote for men who are on the Council, and they are therefore represented. If they do not choose to fill up their voting papers, that is not our fault. They send their representatives here through their voting papers. There is no need to bring in Allied Societies.

MR. HUBBARD: It is necessary to have representatives from the provinces at the Council meetings. No Allied Society can be adequately represented by a London man. It is the local representative on the Council that is required, as he alone can voice the needs of our provincial members.

MR. EDWIN T. HALL: The last speaker has told us of the very valuable work which is given by the Presidents of the Allied Societies to this Institute. After a great many years of experience on the Council I can corroborate that; their services have been invaluable. But I very cordially support Mr. Perks's amendment, that we should not extend the representation of the Allied Societies in the way that is proposed. This matter was most carefully thrashed out when the previous Charter was being drafted, and has been again and again considered. And you must not forget that this is the Royal Institute of British Architects. The Allied Societies, whom we respect and admire, have their own government, and the Royal Institute of British Architects has its own government, and its own government should be by its own elected members. They can be elected either from the provinces or from London, and there is nothing to prevent anyone in the country sending up the name of a gentleman to be put on the list of candidates for the Council. And if he commends himself sufficiently to the profession throughout the country—not in London but throughout the country—he is elected. You must remember that at present the principal Societies have a regular representation on the Council. We wished to encourage the Allied Societies to get as many Fellows and Associates of the Institute into their membership as they could, and we laid down the principle that those Societies which had the largest number of members of the Institute should have their Presidents as representatives on the Council. That is a sound principle. And then we laid it down that other Societies who had fewer members of the Institute should, in regular rotation, be represented on the Council of the Institute. So although a little society consisting of a few men may not be regularly represented, it is represented every few years on the Council. And

you must remember that those members who belong to the Allied Societies have a double representation already. They can elect members of Council by their votes—and their votes are as good as your votes—they can also elect their president of the Allied Society, and if the Society is a large one its President, *ipso facto*, comes here. They have therefore a double representation on the Council as it is, and I am against the principle which says that any society which has not less than fifty of its members on the Register of Architects—because that is what we know it means—should *ipso facto* have the right to come here and sit on the Council of the Institute. Mr. Perks is perfectly right when he says it is conceivable that very few of those might be members of the Institute, and all the rest would be outsiders. Such a representation of such a Society is wrong in principle. It is not a question of setting up the Allied Societies against Associates of the Institute; it is that every member of the Institute should have the right to assist in the direction of the Institute through its Council. I agree also with Mr. Perks in saying that the Council should not be made this unwieldy body. Forty-two is a very large Council, and those of you who are associated with public bodies will know that any private society which has a very large Council is unwieldy and the business is not done so well as when the governing body is kept within reasonable bounds. The proposal here is that the Fellows should be reduced from eighteen to fifteen. We have not heard a word why that should be. Is it that there are not eighteen Fellows of the Institute throughout the country who are worthy to be on the Council? If so, the Institute is deteriorating very sadly. That the Associate members should be increased to ten I support; it is the Council's proposal after mature consideration. But I suggest that we should keep the ordinary members to its present number, even if we do not increase it; that we should keep the present representation of the Allied Societies as it is, which is reasonable. Where a society is a small one it cannot expect to be in the governance of a big Institute like this, which has not only Great Britain, but also the Colonies to consider. I therefore very cordially support what has been said, and give my vote for Mr. Perks's suggestion.

MR. BRUCE CARELL [A.]: The mover of this resolution, in asking us to refer this proposal back to the Council, made the astounding statement that it had had only five minutes' consideration by the Council. I listened to Mr. Hubbard and his interesting speech, and I expected to hear that question dealt with, because if it be a fact that alone is sufficient cause to refer it back. Mr. Hubbard, however, has said nothing whatever on the subject of this five minutes' consideration. Can anyone confirm or correct that statement, because it is pertinent to the whole issue?

MR. ALEXANDER N. PATERSON (Past President of the Glasgow Institute): I would like to make a personal appeal in this matter. The vast majority of this gathering are essentially and necessarily London members of this Institute. The vast number of members of the Institute are spread all over the country; a large number in Scotland, for instance, cannot, as you will understand, be here. I cannot tell you how strong the feeling is throughout the country—I speak mainly from knowledge of my own part of it—in favour of a more adequate representation on the Council. It is stronger than I can tell you. And if it is set aside to-night I tell you there is a considerable danger of disruption and the shedding of a large number of members of the Institute, and setting up north of the Tweed a separate organisation altogether. The last speaker referred to what Mr. Perks had said as a member of the Council. I confess I did not like a member of the Council coming here and saying that the Council had dismissed a matter of this importance after only five minutes' consideration. But leaving that aside, if the Council gave only five minutes' consideration to it—which I do not admit, because I was there—

THE PRESIDENT: I shall have something to say on that point afterwards.

MR. PATERSON: Presidents of Allied Societies, at great expenditure of time and money, have met again and again in London—many of us coming hundreds of miles—and have

considered this matter time after time, and as the result of their consideration they put before the Council their earnest recommendation that some such method should be adopted. The Council, I think very naturally, and with a broad-mindedness which you should give them credit for, gave consideration to these representations, and if they did not give them more than ten minutes' consideration it was because they recognised that their demand was a just one. I think Mr. Perks made a most unworthy appeal at the beginning of his speech in putting the Allied Societies against the Associates. ("Why?") Because the majority of the Associates of the Royal Institute of British Architects are non-provincial, and a large number of those Associates belong to the Allied Societies. ("No.") I am speaking of my own Society. Mr. Perks has quoted various other Associations, such as the Chartered Accountants and the Surveyors' Institution, but he did not say that they have nearly all independent subsections outside of London, which this Institute has not. There is an Electrical Engineers' Institute of Scotland in touch with the parent body in London. With the R.I.B.A. this is not possible at present. Therefore the number of their members on the Council does not touch the present issue. Mr. Perks referred to the abnormal increase in the number of representatives of the Allied Societies on the Council as compared with those of the other bodies, Fellows and Associates; but he did not refer to the undoubted difficulty of those Presidents attending regularly at the meetings. I do not want to deal with the matter from the personal point of view, but every time I have come up to the Council it has meant three days away from my work and ten pounds out of my pocket. And if those Presidents come up once in three or four times that is the most you can expect them to do, whereas London men whose offices are round the corner are able to come here every time. That is a fair argument in favour of an increase of representatives of the Allied Societies. Mr. Perks referred to the fact that less than one-third of the members of Allied Societies were also members of the Institute? And why? Because they have not sufficient faith at present in the work of the Institute. To a great majority of these men the Institute is a far-away body, and they are out of touch with its work. If they had their own men, the Presidents of their own Societies, coming as regularly as they might to the meetings of the Council, and bringing back word of what was done there, it would bring those Societies much closer into touch with the work of the Institute than is the case now, it would strengthen enormously the influence of the R.I.B.A. in the Provinces and in Scotland, and I am sure that in a very few years it would increase very largely the membership of the R.I.B.A. throughout the country. It is simply that question of aloofness at present which keeps men in the North and elsewhere in the country from joining the R.I.B.A. Mr. Perks referred rather contemptuously to the visits of the Presidents to the meetings costing the Institute £100. I would only say that if you multiply the Presidents by the amount of money spent on them, that would be a small item compared with the personal expenditure of the men who come here to support the Institute. As against Mr. Perks' reference to Northamptonshire with its two members I may say that I am the only representative of Scotland here to-night. Scotland has 252 members and Licentiates—viz., 64 Fellows, 40 Associates, and 148 Licentiates. They are chiefly in Glasgow, Edinburgh, Dundee, and Aberdeen—resident and practising in Scotland. And they have only one representative, and he can attend only once every four or five meetings. Is that adequate representation? I can only conclude by appealing to the broad-mindedness of the members here and their interest in the R.I.B.A. that it should represent, as it does not to-day represent, the feeling, the work, and the aspirations of the architects of the United Kingdom.

MR. G. HASTWELL GRAYSON (F.), Past President of the Liverpool Society: Mr. Paterson did not attempt to answer what Mr. Hall said as to the dual voting power of those in the Provinces. Speaking for myself only, I may say we do not care about the direct vote. Many of us never do vote. One member told me to-day that he has been for fifteen years an Associate but he has never voted for the Council because he

did not know enough about the men. It is no good voting from the designs they show in the Academy; we can judge of the artistic merit of the men, but we in the Provinces cannot judge of the administrative ability of those on the Council. After I had been on the Council a year or two I found there were many men who had very great administrative ability whom I had not heard of before. It does not follow that a man who has got artistic ability has also great administrative ability. I do believe that all the architects in the Allied Societies would cheerfully give up the direct vote, but they attach very great importance to having their own representative. And if this is referred back to the Council, I would suggest their cutting out the direct votes of Allied Societies and giving direct representation. There is another point, and that is the name R.I.B.A., and I would lay emphasis on the "B." This Institute claims to represent the British Isles. The Council are having difficult questions brought before them dealing with all parts of the United Kingdom, and it is imperative that they should have someone at hand to give them local knowledge on the points. It does not matter whether a man comes from Scotland for a meeting every now and then, but there will be an important matter touching Scottish architecture, and it will be his duty to come forward and give the Council the best advice possible at the Council meeting. To-day, at the Council meeting, we had a question from near Birmingham, and another from Lancashire, and questions of that sort are turning up at every meeting. Probably the next question will be one from the South of England, or the West of England, or from Scotland, and it is imperative that the Council should be able to answer those questions promptly and with great authority, and unless they have Allied Presidents there to prompt them, sooner or later they will make a mistake.

THE PRESIDENT: I shall ask you to adjourn this meeting because the question before us is a very important matter indeed. The whole interest of the Institute and the great scheme we have in hand are involved in this question. Before I go any further I will answer one point. Mr. Capell said he was surprised to hear that the Council had devoted only five minutes to this important question. I say, with deference to my friend Mr. Perks, that that is not the case. The Committee of the Council to which this matter was entrusted had given it most careful consideration for several days. And when we were dealing with this matter—I do not know whether it occupied five minutes or fifteen minutes—the points were put to the Council, and the Council knew perfectly well what they were doing, and they agreed. Mr. Perks did not agree to that proposal, but I regret that he should come here to-night and give this impression of the proceedings, because I think his remark reflected a grave injustice upon your Council. They gave most anxious consideration to this problem from start to finish, and it is not right to suggest that the Council have not considered this matter properly. I can say that, as I had the honour to preside over their deliberations. Mr. Perks in his speech has given us some amusing points, but he was not quite sound about his facts. I ask you to consider this matter further. It is vitally important to the Institute. We have not embarked upon a great scheme without due deliberation, and you yourselves have ratified the policy of your Council in dealing with this matter by Charter. And if we are going to do that, we shall cover a very much wider area than we have covered hitherto, and it is right that that area should be properly represented. I suggest that we adjourn this meeting. Perhaps some member will formally propose the adjournment.

MR. HURDARD proposed and MR. MAX CLARKE seconded the adjournment.

MR. PERKS: I am quite willing that the question should be adjourned. I should like to say that I did not raise this point. Mr. Peach said that the Council had very carefully considered it, and when statements like that are made by Members of the Council and I have formed a different opinion I have a right to give it. As I have said, ten members signed an appeal to reconsider it.

The motion for adjournment was then put and agreed to.



9 CONDUIT STREET, LONDON, W., 13th June 1914.

CHRONICLE.

THE ANNUAL ELECTIONS.

Scrutineers' Report.

The results of the Annual Elections are recorded in the subjoined Report of the Scrutineers, which was read at the General Meeting last Monday in accordance with the By-law:—

The Scrutineers appointed to count the votes for the election of the Council and Standing Committees for the Session 1914-15 beg to report as follows:—

874 envelopes were received—259 from Fellows, 613 from Associates, and 2 from Hon. Associates. The result of the election is as follows:—

PRESIDENT.—Ernest Newton, A.R.A.

PAST-PRESIDENTS.—Reginald Blomfield, R.A., Leonard Stokes.

VICE-PRESIDENTS.—Alfred William Stephens Cross, John Alfred Gatch, George Hubbard, Henry Vaughan Lanchester.

HONORARY SECRETARY.—Edward Guy Dawber.

(Signed) H. FAVARGER, *Chairman of Scrutineers.*

REPRESENTATIVES OF ALLIED SOCIETIES.—Graham Clifford Awdry (Bristol), Robert Burns Dick (Newcastle), Frank Brookhouse Dunkerley (Manchester), Glendinning Moxham (South Wales), Adam Francis Watson (Sheffield), John Watson (Glasgow).

REPRESENTATIVE OF THE ARCHITECTURAL ASSOCIATION.—Herbert Austen Hall.

HONORARY AUDITORS.—Robert Stephen Ayling, Henry Albert Saul.

(Signed) H. FAVARGER, *Chairman of Scrutineers.*

(MEMBERS OF COUNCIL.

ELECTED: Thomas Edwin Cooper, 604 votes; Walter John Tapper, 572; Charles Henry Bourne Quennell, 538; Sydney Perks, 528; David Barclay Niven, 506; Percy Scott Worthington, 494; Stanley Davenport Adashead, 477; Herbert Winkler Wills, 454; Alexander Nisbet Paterson, 451; Albert Edward Richardson, 451; William Gillbee Scott, 451; Emanuel Vincent Harris, 421; Harry Redfern, 414; Paul Waterhouse, 388; Arthur Rutherford Jemmett, 377; William Curtis Green, 370; Ernest Richard Eckett Sutton, 363; Henry Thomas Hare, 359.

NOT ELECTED: Walter Cave, Gerald Calcott Horsley, George Herbert Oatley, H. Philip Burke Downing, Herbert Duncan Searles-Wood, Charles Stanley Peach, Arthur Keen, Harry Percy Adams, William Adam Forsyth, Thomas Geoffrey Lucas, Edward Prioleau Warren, William Edward Riley, Matt Garbutt, Henry Victor Ashley, Louis Ambler, Banister Flight Fletcher, Ernest Flint, Andrew Thomas Taylor.

869 papers were received, of which 58 were invalid.

(Signed) H. FAVARGER, *Chairman*

C. H. BRODIE,

F. DARE CLAPHAM,

WILLIAM H. BURT,

CHARLES WOODWARD,

MAURICE S. ADAMS,

Scrutineers.

ASSOCIATE-MEMBERS OF COUNCIL.

ELECTED: William Robert Davidge, 528 votes; Herbert Shepherd, 511; Leonard Rome Guthrie, 463; Samuel Douglas Topeley, 448; Herbert Arthur Welch, 418; Robert Atkinson, 411.

NOT ELECTED: Leo Sylvester Sullivan, Edwin Stanley Hall, George Leonard Elkington, Edwin Gunn, Kensington Gammell, Philip Edward Webb.

824 papers were received, of which 27 were invalid.

(Signed) H. FAVARGER, *Chairman*

R. HEATH MEW,

PERCY P. COTTON,

PAGET L. BAXTER,

KENNETH DALGLISH,

Scrutineers.

ART STANDING COMMITTEE.

FELLOWS.—**Elected:** Henry Vaughan Lanchester, 618 votes; Edward Guy Dawber, 606; Halsey Ralph Ricardo, 589; Gerald Calcott Horsley, 569; Walter Cave, 528; William Adam Forsyth, 511; Henry Thomas Hare, 497; H. Philip Burke Downing, 467; Henry Heathcote Statham, 454; Edward Prioleau Warren, 452. **Not Elected:** Arthur Keen, Raymond Unwin, Henry Martineau Fletcher, Harry Sirt.

ASSOCIATES.—**Elected:** Robert Atkinson, 633 votes; Sidney Kyffin Greenlade, 601; Arthur Needham Wilson, 561; Matthew James Dawson, 526; Alfred Wyatt Papworth, 522; Philip Edward Webb, 501. **Not Elected:** Albert Reginald Powys.

756 papers were received, of which 30 were invalid.

(Signed) H. FAVARGER, *Chairman*

SIDNEY TATCHELL,

GUY CHURCH,

S. J. EDWARDS,

ARTHUR W. KENYON,

Scrutineers.

LITERATURE STANDING COMMITTEE.

FELLOWS.—**Elected:** John Alfred Gatch, 668 votes; Richard Phens Spiers, 632; Frederick Moore Simpson, 592; Paul Waterhouse, 565; Albert Edward Richardson, 559; Charles Harrison Townsend, 554; Edwin Alfred Rickards, 551; Arthur Stratton, 535; Charles Sydney Spooner, 522; Arthur Thomas Bolton, 509. **Not Elected:** Herbert Hardy Wigglesworth, David Theodore Fyfe.

ASSOCIATES.—**Elected:** William Godfrey Newton, 605; William Henry Ward, 555; Herbert Passmore, 531; Martin Shaw Briggs, 528; William James Davies, 482; John Stevens Lee, 462. **Not Elected:** Charles Edward Sayer, Thomas Simons Atlee.

750 papers were received, of which 14 were invalid.

(Signed) H. FAVARGER, *Chairman*

HORACE FARQUHARSON,

T. LAWRENCE DALE,

ROLAND WELCH,

Scrutineers.

PRACTICE STANDING COMMITTEE.

FELLOWS.—**Elected:** Max Clarke, 551 votes; George Hubbard, 505; Herbert Duncan Searles-Wood, 504; Sydney Perks, 495; Alfred Saxon Snell, 455; Matt Garbutt, 452; Alfred William Stephens Cross, 445; Herbert Osborn Cresswell, 422; Edward Greenop, 422; William Henry White, 377. **Not Elected:** Herbert Arnold Satchell, Alan Edward Munby, William Henry Atkin-Berry, John Hudson, Albert Walter Moore, Frederick William Marks, Ernest John Gosling.

ASSOCIATES.—**Elected:** Horace William Cubitt, 527 votes; Herbert Shepherd, 494; Edwin Gunn, 478; John Douglas Scott, 437; Henry Albert Saul, 402; Percival Maurice Fraser, 399. **Not Elected:** Kensington Gammell, Digby Lewis Solomon, James William Stonhold.

695 papers were received, of which 11 were invalid.

(Signed) H. FAVARGER, *Chairman*

HENRY J. CHETWOOD,

A. EDWARD HUGHES,

H. HUBERT FRASER,

Scrutineers.

SCIENCE STANDING COMMITTEE.

FELLOWS.—*Elected*: Bernard Dicksee, 594 votes; Harry Percy Adams, 556; Charles Stanley Peach, 556; Robert Stephen Ayling, 544; William Edward Vernon Crompton, 537; Frederic Richard Farrow, 523; Alfred Conder, 499; George Hornblower, 485; Ravenscroft Elsey Smith, 476; Allan Ovenden Collard, 423. *Not Elected*: Horace Cheston, Ernest Flint, Osborn Close Hills.

ASSOCIATES.—*Elected*: William Robert Davidge, 483; Edward Stanley Hall, 460; George Leonard Elkington, 449; Robert John Angel, 401; Henry William Burrows, 370; Ernest Alexander Young, 361. *Not Elected*: Ernest William Malpas Wonnacott, Norman Odell Searle, John Hutton Markham, Edward Harding Payne.

745 papers were received, of which 8 were invalid.

(Signed) H. FAVAROED, *Chairman*
HENRY JAMES WISE,
LESLIE WILKINSON,
H. FRANKLYN MURRELL, } *Scrutineers.*

Rome Scholarship and Henry Jarvis Studentship, 1915

The Scheme of Competition for the Rome Scholarship in Architecture, offered by the Commissioners for the Exhibition of 1851, and for the Henry Jarvis Studentship, offered by the Royal Institute of British Architects, for the year 1915, is as follows:—

The Rome Scholarship will be of the value of £200 per annum, and will be ordinarily tenable at the British School at Rome for three years. Candidates must be British subjects, and less than 30 years of age on 1st July 1915.

The Jarvis Studentship will be of the value of £200 per annum, and will be ordinarily tenable at the British School at Rome for two years. This Studentship will be confined to Students or Associates of the R.I.B.A. (see section B), but otherwise the conditions for the two awards will be the same.

The Competition, which will be conducted by the Faculty of Architecture of the School at Rome, will be in two stages:—

A. An Open Examination.

B. A Final Competition, open to not more than ten candidates selected from those competing in the Open Examination.

A. THE OPEN EXAMINATION.

Competitors should notify the Hon. General Secretary, British School at Rome, 54 Victoria Street, S.W., of their intention to compete in this Examination as early as possible, and in any case not later than the 23rd January 1915, and with such notification must enclose a certificate of birth, or a declaration as to age and nationality, duly attested by two responsible persons.

The Subject for this Examination will be a "Courts of Justice."

The building is to be placed on a site 400 feet square, having its principal frontage to a river; the buildings flanking the site are to be Government offices and their design is to be suggested, and they may be connected with the Courts building by open or covered ways. The water level of the river is 20 feet below the ground level of the site.

The Courts of Justice are to be four in number, for civil business only, and they are to be contained in one building; each court is to measure 2,400 feet super.; public access to the Courts is to be from the river front through a large hall, Judges and Barristers to enter at the back. Four Judges'

rooms, and rooms for Barristers, Jurors, Solicitors, and Witnesses are to be provided, together with a Bar Library. A lower ground floor must be provided, suitably arranged for large numbers of clerks and for subdivision as offices. No provision is to be made for prisoners.

The drawings required are:—

Plan of Ground Floor, showing the general disposition of the surrounding buildings, including the river embankment.

Plan of the Lower Ground Floor.

Two elevations.

Longitudinal and transverse sections—all to a scale of $\frac{1}{2}$ inch to a foot.

One principal elevation to $\frac{1}{4}$ -inch scale.

A detail elevation of part of the river façade to $\frac{1}{2}$ -inch scale.

A perspective of the river front in which the Courts of Justice themselves shall measure 18 inches.

A short descriptive report must accompany the design.

The general drawings may be finished in ink or pencil, and the view in any manner at the competitor's discretion.

Each design must bear a motto, and must be accompanied by an envelope enclosing the name of the competitor.

Drawings must not be executed as part of a school course, and the competitor must submit a written statement to the effect that this regulation has been complied with, together with a declaration that the work has been done by his own hand.

The drawings, together with the above-mentioned documents, must be sent to the Hon. General Secretary, British School at Rome, c/o The Secretary R.I.B.A., 9 Conduit Street, W., and must reach him not later than noon on 30th January 1915.

B. THE FINAL COMPETITION.

This Competition will be held "en loge" in London, and particulars regarding it will be announced hereafter.

The successful candidate in this Competition will be recommended for appointment to the Rome Scholarship, and the Student or Associate of the Royal Institute of British Architects who is placed next in order of merit will be recommended for appointment to the Jarvis Studentship.

GENERAL.

The Faculty reserve to themselves the right, at their absolute discretion, to alter any of the conditions, periods, dates or times herein specified, and to decline to hold the Final Competition, or to select any candidate for it, or to make any recommendation for the awards.

The Faculty also reserve to themselves the right to publish photographic reproductions of, or exhibit, any of the works submitted by competitors.

EVELYN SHAW.

Hon. Gen. Secretary.

Suggested Rebuilding of Charing Cross Bridge.

Mr. Raffles Davison's Paper "Beautiful London," read at the meeting of the 18th ult., has furnished the subject since for three leading articles in *The Times*. On the 1st June an article headed "A London Eyesore" discussed Messrs. Davison and Barclay Niven's scheme for the removal of Charing Cross Station to the south side of the river, and the

substitution for the present railway bridge of a magnificent new structure for foot and vehicular traffic.

The scheme (says *The Times*) has one great advantage that it is thoroughly practical, and is above all things an attempt to solve certain problems of traffic that remain insoluble so long as the present railway bridge exists. It is not grandiose, like some of the schemes suggested, and it does not give us a new and magnificent roadway from the new bridge to Trafalgar Square, since the proposed new road to the Strand would not be more important than the corresponding Whitehall Place. It would be a great convenience, putting an end to the present incessant congestion of traffic near Charing Cross, but it would not add any splendid new feature to London except the place where all these roads would meet the bridge. We should, we confess, like the scheme to be larger, to include a new and important approach to Trafalgar Square, and another open space on the south side, into which new routes, or routes suddenly become important, could converge. For it is an essential point of the change that with it the whole character and value of the south bank of the river would be altered. It would become a part of the West End; and the scheme should therefore be planned from the start in contemplation of this change, and with the aim of making the greatest possible profit for the community out of it. Provision would need to be made for the enormous stream of traffic that would pour southward as soon as there was a vent for it, and that not after the bridge was built, but while it was building. Otherwise the change on the south side of the river would produce all the old haphazard and incoherent results of such changes in the past; indeed, the confusion would be worse than ever, as the change would be great beyond all precedent.

So the only complaint we have to make against Mr. Davison's scheme is that, so far as we are aware, it is not large enough. A great scheme will be easy on the south bank of the river, because, as we have pointed out before, the property there is in very few hands. The question of the approach from the new bridge to Trafalgar Square and the Strand is a very difficult one, and, though Mr. Davison's answer to it is simple, it disappoints us a little with its very simplicity. The new bridge, if it is made at all, ought to be one of the most magnificent features of London; it ought at least to be something worthy of our present wealth and national power, something that will be a monument of our age to all future time, and it cannot be that unless the approaches to it are equal in splendour with the bridge itself. There are many who believe that, the more we attempt now, the more egregious will be our failure. But to assume that is to make success impossible. Great achievements in building are the result of great attempts, and to despair of the art of our own time is the way to make it insignificant. Our fathers were diffident enough—and the result was Charing Cross Station and bridge, a result as deplorable practically as artistically. Because they tried to save money on London they lost it in incalculable sums for themselves and for us. If we can make up our minds to spend money on London, we shall save it in sums still more incalculable for ourselves and for posterity; and—what is perhaps of some importance—we shall not be a laughing-stock or a byword to more enlightened future generations.

Recurring to the subject on the 5th inst., *The Times* says:

Intimately connected with any proposals to construct a new bridge at Charing Cross and to transfer the station to the south side of the river are questions relating to the river frontage on that side, the cross-river traffic, and existing and future bridges, the road development of the south side, and the railway problem.

At present there is no single authority which could grapple with the vast interests involved in all of these questions. Yet it is evident that if the improvement at Charing Cross is to be a real and permanent benefit to the community it must form part of a scheme for dealing with the subject as a whole. A piecemeal attempt at reconstruction would only lead, as has

been the experience of London so frequently in the past, to new difficulties in the future.

The bridge as designed by Mr. Davison is an open bridge of the familiar type. The hope is expressed in some quarters that a bridge with houses upon it may be decided upon. The rentals derived from shops and houses on both sides of a bridge and running its whole length would furnish a large revenue. Sir Aston Webb pointed out in his speech on "London of the Future," delivered at the London Society in January, that the original London Bridge was of this type, and that the vast funds of the Bridge House Estates Committee of the Corporation were derived from the rentals. The bridge, it is suggested, should also have covered footways for the shelter of passengers.

Assuming that the railway company assented to the transference of their station to the south side of the Thames, the question of the railway traffic would arise, as the bridge would be used only for ordinary road traffic. It would be necessary to construct a tunnel beneath the Thames for the trains. This would be very costly, but the expenditure would be partly recouped by the enhanced value of the land comprising the present station and its approaches.

When once all this was agreed to, however, there would still remain the question of reclaiming the land, now only a mud-bank covered with water at high tide, which runs from Lambeth to the Borough. Already a beginning has been made by the erection of the County Hall, which runs right up to the water. Other buildings, of which the new Charing Cross Station might be one, are likely to come alongside of this hall, and to extend as far as Waterloo Bridge. Obviously, then, there is a big problem involved as to the proper treatment of this river front throughout the whole of this length, and it is one which cannot be detached from the question of the bridge. It has received attention, and its solution, while far from easy, is by no means impossible. One proposal is that from a point adjoining the new County Hall at Southwark Bridge there should be a continuous embankment 100 feet wide so as to coincide on its river side more or less with the low-water edge of the mudbank.

The whole question of these improvements is being very seriously considered by influential persons interested in the future of London, and will continue to be pressed on the public attention.

The Visit to Paris: Banquet of the Société des Architectes Diplômés: Mr. Reginald Blomfield's Speech.

Particulars were given by Mr. Gerald Horsley [*F.*] in the last number of the *JOURNAL* of the recent visit to Paris of members of the Institute and the Architectural Association, on the occasion of the Anglo-French Exhibition of Ancient and Modern Architecture held under the auspices of the Société des Architectes Diplômés in the Pavilion of the Jeu de Paume at the Tuileries. A feature of the visit was the banquet of the Société, which took place at the Palais d'Orsay under the presidency of M. Viviani, the French Minister of Public Instruction, when the following speech was delivered by Mr. Reginald Blomfield, R.A., President of the Royal Institute:—

M. LE MINISTRE, M. LE PRESIDENT AND GENTLEMEN,—I feel rather shy of addressing you at all, and especially at a gathering of architects such as this, because not only do you, my colleagues of France, possess a splendid architecture, but you also enjoy an incomparable tradition of oratory. The country that has produced Mansart and Garnier is also the country of Bossuet and Gambetta, and it is for this reason, and because I have no wish to pain you by murdering your subtle and beautiful language, that I shall make my few remarks in my native tongue.

First let me, on behalf of my colleagues and myself, thank you, our French confrères, for the compliment you have paid us in asking us to co-operate with you in organising an Exhibition of British Architecture, and for the great courtesy and consideration you have shown us throughout the whole enterprise. At one period that enterprise was in a perilous state, but with characteristic energy M. Godefroy and M. Mora came over to England, and in three days the whole affair was settled. It is a great compliment to us that you should have cared to see our work, and should have thought it of sufficient interest to be worth introducing to your fellow-countrymen; and that compliment is clinched and endorsed by this most hospitable entertainment to-night, and by the opening of the Exhibition this afternoon by M. Jacquier, Sous-Secrétaire d'Etat des Beaux-Arts, by your presence here to-night, M. le Ministre, and by the promised visit of the President of this great Republic next Tuesday. We, in common with all civilised races, regard the long record of French architecture with unbounded admiration, and the Royal Institute of British Architects, over which I have the honour to preside, has signalised this feeling by awarding its Royal Gold Medal to that fine veteran of architecture M. Pascal. From the earliest days, in Romanesque, in Gothic, in its matured Classic, France has established and maintained its astonishing ascendancy in architecture. France has been great in every art, but I venture to think that its architecture is the finest and purest expression of the French genius. I was asked recently to sum up briefly the points that distinguish French from English architecture. It was a large order, and though I have written two bulky volumes on French architecture I declined the unequal task. Yet I do feel that there is a certain broad distinction which can be seized at any rate in the last 300 years. Yours is the art of the big battalions, disciplined, organised, guided by immense traditions, marching with steady tramp towards great and recognised ideals. The style and distinction, the fine selection, and sense of abstract design that marks all your work is the sure and certain evidence of this. You have always had in each succeeding age a definite school of thought in art. We also had a school, and a fine one, in the eighteenth century, but we lost it in the last, and are now slowly struggling back again to surer ground. In fact, the Englishman's method is peculiar to himself—he saunters along and follows up what takes his fancy; now and then there arises out of space an individual artist of unique genius—Inigo Jones and Wren, Gibbs and Chambers, Gainsborough and Reynolds, Constable and Turner and Alfred Stevens, are men that any country would have reason to be proud of. Our men seem to come by accident, and this individualism is in the very blood of the race. It is here that we have our lesson to learn from you. We meet here to-night representatives of two different streams of thought, you who represent a great tradition, we

ourselves who represent perhaps an excessive individualism; and this is the reason why this meeting has a deeper meaning than ordinary courtesy, deeper even than the expression of those genuine feelings of sympathy and regard which now bind our races together. It means that for the first time the architecture of both countries has met on common ground. You will, I hope, find something of interest and value in the exhibition opened to-day. We ourselves, I am sure, shall profit very greatly by contact with your noble tradition of organised training and craftsmanship. We are in our own way and subject to our own conditions treading in your own footsteps, inasmuch as we are this very year opening our British School at Rome. Such an enterprise must always have difficulties and obstacles to overcome at the start. You will recollect the history of the foundation of your own great School 250 years ago. I feel sure I shall not appeal in vain for the sympathy of its brilliant elder sister, the School of the Villa Medici.

Let me again thank you all sincerely on behalf of my colleagues, and let me personally express the hope that at no distant date you gentlemen will return the visit in England. The *rapprochement* in our art that has been so brilliantly initiated to-night must not be allowed to lapse, and I hope that year in and year out we may return each other's visit. I venture to suggest that the President and officials of the Société des Architectes Diplômés par le Gouvernement should visit us in London one year and that the officials of the Royal Institute of British Architects should return the visit in the year following. Once more, gentlemen, I thank you for your most loyal co-operation and for the very great kindness and courtesy you have all shown us.

The Architectural Association Country Membership.

With a view to widening the scope and usefulness of the Architectural Association, the class of Country Members has been created. Candidates must be engaged professionally in the study or practice of architecture, and be members of an Architectural Society whose headquarters are not less than fifty miles from London. The Council hopes by this means to make the Association of value to those who are precluded by distance from London from taking full advantage of the privileges offered by ordinary membership. Country Members, in return for a nominal subscription of 7s. 6d. per annum, are offered the following advantages: The *Architectural Association Journal* is forwarded monthly; the Employment Register is open both to those seeking employment and to architects requiring assistants; Country Members have full use of the Loan Library, payment of carriage only being expected of them; they have the privilege of taking part in the annual excursion of a week's duration in England or on the Continent which takes place under the guidance of the President, also of borrowing lantern slides and cinematograph films on special terms, and of com-

peting for the Association's valuable prizes and studentships; when in London they have full use of the Association's premises, Library, Members' Room, Dark Room, etc., are entitled to attend its meetings, visits, etc., and are eligible for membership of its various clubs. The Secretary, for the convenience of Country Members, keeps a list of suitable apartments, and renders assistance in obtaining permits for sketching and measuring, etc. The names of Country Members will be published in the *A.A. Brown Book*.

The British School of Archæology in Egypt.

Last winter's work of the British School of Archæology in Egypt has been full of interest, both in scientific discovery and in material acquisitions. The report for 1913, which was recently issued, says:

In the previous year a great cemetery of the first dynasty (5500 B.C.) had been partly explored at Tarkhan, about 35 miles south of Cairo; it was expected that it would be found to extend beneath a wide valley full of sand, but this was not mooted, in order to avoid tempting dealers to attack it. This year the valley was worked and found to contain some 800 graves closely grouped on each side of an axial road. These were carefully cleared, all the bones measured, the skulls removed whenever possible, plans drawn of each grave and of the whole cemetery, and the shape of every vase of stone or of pottery exactly registered. This forms the most complete record yet made of any cemetery. It was well worth such care, as it belongs to the most critical point in the history of Egypt. The conquering tribe of the dynastic people had advanced northward from Abydos, subduing the Nile Valley, until Mena founded the new capital of united Egypt at Memphis. Here at Tarkhan was a great settlement, beginning one or two generations before Memphis, and dying away shortly after the new capital was established. What has been uncovered is but a part—probably the smaller part—of the cemetery, which is now mainly under water. Thousands of well-to-do people were buried here within two or three generations, and we must regard this as the pre-Memphite capital of Egypt. This site is therefore the most important centre for studying the critical point of the earliest historical race of Egypt mixing with the prehistoric peoples.

The preservation of the tombs in the cemetery of Tarkhan is remarkable; owing to the sand filling up the valley, the bodies have been less disturbed than is usual, and the upper structures have been left in some cases absolutely perfect. The earliest stage of the *mastaba* and tomb chapel can here be seen in perfection. The brick wall which retained the pile of sand above the graves, the little slits in it for the soul to come forth to the offerings, the enclosure for the offerings, and the stacks of pottery brought to the grave by the relatives and friends with food and drink for the dead—all were uncovered exactly as they had been left over 7,000 years ago. In the graves were large numbers of alabaster vases, slate palettes, and pottery vases, all of which have been drawn; the types of these, when compared with those of the Royal tombs, serve to date the graves to the various reigns shortly before and after Mena. Several blue glazed vases were found, showing that such glazing was commonly in use. Two ivory spoons were of types new to us, one engraved on the bowl with birds and plants, the other formed as two arms for the handle with conjoined hands for the bowl. Alabaster stools, with legs 4 inches or 5 inches long, were used for supporting dishes. Although beads had been specially sought by ancient plunderers, who dragged away the neck and wrists, yet many graves contained strings of cornelian, garnet, and blue glazed beads; probably nearly everyone was buried with a necklace or armlets. As a whole we get a view of the population, apart from the wealth of the King and court, and see that they had good furniture, fine

vases, and plenty of ornament, and were apparently in quite as civilised a condition as the Egyptians of later ages.

Who were these people is the question which the physical remains can best answer. The measurements of the limb bones show that while the women were of a single type, there were two different types of men. The majority of the men belong to the type of the women; doubtless these are the native population. A minority of about a tenth of the men are of a different type, much less variable than the native, indicating that the invading men of the dynastic race were a compact and closely related tribe. Both before and after Mena there is an excess of women over the men in the proportion of six to five. The historical rendering of these facts would seem to be that the dynastic invaders were a single tribe or clan, nearly all men, about a tenth of the population of the capital where they settled, and each brought in from the surrounding country two or three native women. The invaders were an inch or two shorter than the native population. In their graves they had a much larger proportion of the costly stone vases, and they alone had stacks of pottery offerings placed by the grave after burial. Besides this mixture there was also commercial intercourse with the north, shown by foreign pottery of Mediterranean fabric, found repeatedly in graves of the middle of the first dynasty. Although the damp of the valley prevented the removal of the bones, which were all measured as they lay, yet by extreme care some seventy of the skulls have been preserved by solidifying with paraffin wax; these will be studied in England.

Two large *mastabas*, over a 100 feet long, were found on the hill: the outsides were covered with elaborate panelled patterns, and the burial chamber in each was a very wide rock pit twenty feet deep. From one burial there remained half-a-dozen great alabaster vases, and piles of clothing in strong condition; as this is of the middle of the first dynasty (5400 B.C.), it is of technological interest. The remarkable feature of these tombs was the number of subsidiary graves around them. These graves were quite perfect, showing the superstructures as fresh as when built; in them were wooden coffins, roughly made of house-timbers, and containing bodies of the family of the chief; one of the coffins contained only a duck, doubtless a pet. The same chief had his three asses also buried under a tomb. These are the only skeletons of asses known from ancient Egypt.

Another site, at Riqqeh, a few miles further south, has given good results of the twelfth and eighteenth dynasties. Large cemeteries were cleared and some immense stone tombs with chambers as large as those of pyramids. One large tomb had been attacked anciently; the plunderer had crawled in by a small hole, and had begun to remove the ornaments, when the roof fell and crushed him. Thus was saved for our days a gold pectoral inlaid with coloured stones, like the pectorals of the celebrated jewellery of Dahshur in the Cairo Museum, the only specimen of this splendid work of the twelfth dynasty that has been seen in England. With it was part of a similar jewel of Senusert II., and a gold shell of Senusert III. Of the same period is a black stone statuette, having the headdress remodelled in a second fashion by adding black cement; also sets of canopic jars, some with finely carved heads.

A painted rock-tomb was found at the bottom of a shaft over 20 feet deep; the owner, Senmertra, lived in the twelfth dynasty, and he with his family are shown with the offerings for the dead, along the sides of a chamber about 10 feet in length. The ceiling is painted with a weaving pattern of crosses. In another tomb, of Si-uazet, was a finely painted wooden coffin of very massive size, bearing detailed figures of the clothing, wigs, ornaments, tools, and weapons, beautifully finished. Unfortunately it was too much rotted to be completely preserved, and the facsimile drawing will be the only record of it. The same is the case with another coffin covered with long inscriptions, originally made for a man named Amen, and then appropriated by a certain Antef. An exquisite little wooden statuette of the man was in the tomb. Mrs. Petrie was able to give some weeks to the complete facsimile copying of these coffins and the tomb; and it is urgently needful to prepare such a record of material which is in too

delicate a condition to be transported. In another tomb was a beautifully cut sarcophagus of red granite, of remarkably true workmanship.

Of the eighteenth dynasty is a gold necklace with a badge of a scribe of Thothmes III. Of this age also is the tomb of the chief of the district, Mer-Tum, the ancient name of Meydum; he was named Apiy, and was scribe of the estates of the temple of Aten, the sun-god. A fine inscribed heart scarab and many other scarabs and bead necklaces were found in his deep tomb.

At Memphis more statuary and sculptures of the eighteenth and nineteenth dynasties have been found, in clearing another acre and a half of the great temple of Ptah; we further learn that Shishak decorated the temple with a cornice. Gradually the great clearance of this historic site is extended year by year; and it is hoped that the new law by which the Government claims everything found in private land will not be exercised to check this work. In the city, some workshops have yielded all the various stages of the manufacture of stone vases, from the rough block to the vase spoiled in finishing; other shops contained a great variety of coloured stones brought from the eastern desert and from abroad, including the beautiful bright green felspar in granite, not known before. A remarkable standard measure was found, of Ptolemaic age, parallel lines over a foot long being engraved on a slab rather over 2 feet in length. The accuracy of the scale is finer than a hundredth of an inch; the standard is a cubit of 25.8 inch, known in Egypt under the eighteenth dynasty, and used in Asia Minor, classical Germany, and mediæval England. Of late date is a mummy label naming a new trade guild, that of the Libarii or cake sellers; Isakanthona, daughter of Apollonios, belonged to the cake sellers of Memphis.

The excavations have been carried on by Prof. Petrie, Mr. Engelbach, the Rev. C. T. Campion, Mr. H. B. Thompson, and Mr. G. North; Mrs. Petrie executing the drawings. The Cairo Museum has, of course, received half of the objects, a few to be kept there, some ransomed back by the finders to be given to public museums, and some to be sold to tourists by the Government regardless of scientific results. The other half of the antiquities, allotted to the school, were presented to public museums in various countries, and it is from such precisely dated material, and from specimens kept together in their groups, that we can build up an accurate knowledge of the details of Egyptian civilisation. The full publication of these results will remain as the record for study in future centuries.

Discoveries at Tiryns.

Excavations carried out by the German Institute at Athens on the site of prehistoric Tiryns have brought to light a still more ancient palace lying beneath the remains of the palace laid bare by Schliemann and Dörpfeld some thirty years ago. The whole elevation on which the fortress-palace stands was thickly inhabited at least as far back as 2000 B.C. Among the early habitations now discovered is a large circular building about 14 metres in diameter, which may be recognised as the most ancient palace of the dynasts of Tiryns. This structure, which was built before 1500 B.C., differs completely in design from the later building. The places of sepulture of the local Princes have hitherto been sought for in vain, but a beehive tomb in excellent preservation has now been discovered and excavated. More than 2,000 years ago it was robbed of its treasures, and in the

time of the Roman Emperors it was converted into an oil-mill. Other tombs have been found which it is hoped may prove intact; they will be excavated next season.

Thaxted Church: An Appeal.

Sir T. Fowell Buxton, Sir Walter Gilbey, and Lord Rayleigh are issuing an appeal for help to preserve Thaxted Church. The lead on the roof has almost completely perished, and the weather threatens to destroy the carved timbers of oak and Spanish chestnut. Even more serious, the tower threatens to give way, and to bring about the fall of the exquisite steeple, thus possibly destroying the nave.

Thaxted Church, set in the uplands of Essex, is one of the few examples of the ultimate development of Gothic architecture, in which the massive walls of earlier time are replaced by a mere framework of glass and tracery, supporting, for all its frailness, large expanses of carved roofings. The church has escaped the attentions of the restorer; and it is more and more needed to meet the requirements of an increasing population. A new railway, a new industry, a reviving agriculture, already promise that in a few years Thaxted will fully require the large proportions of this cathedral-like structure.

The Bishop of St. Albans, recommending the fund, says that "there is real danger of irreparable injury if the work of preservation is not taken in hand at once." On the recommendation of the architect, Mr. Randall Wells, whose report is endorsed by the Society for the Protection of Ancient Buildings, the Preservation Fund Committee appeal for £5,000.

The committee includes the Bishop of Chelmsford, the Bishop of St. Albans, the Duke of Newcastle, the Earl of Plymouth, the Earl and Countess of Warwick, Mr. George Clausen, R.A., and others.

Further particulars, with photos, may be had from the Hon. Treasurer, Mr. H. J. Cunningham, Braintree, who will gratefully receive subscriptions.

International Garden Cities and Town Planning Association: Congress and Tour 1914.

The International Garden Cities and Town Planning Association, to which are affiliated most of the important Housing and Town Planning bodies in the world, is holding its first Congress and tour in England during July next. The Congress will assemble in various cities, in order to allow ample time to inspect actual examples of the subject of the Congress. Visits will be paid to the various Garden City schemes under the guidance of those who have been responsible for the work. Housing by municipal authorities, by public utility societies, and by private individuals and companies will also be inspected, while the principal Town Planning schemes will be explained by experts. The tour will be attended by parties from America, Austria, Canada, France, Germany, Great Britain, Italy, Poland, Russia, and Spain. The Congress opens in London on Thursday, 9th July, and closes at Letchworth, with an address by the

President, Mr. Ebenezer Howard, on Friday, 17th July. Visits will be paid to Birmingham, Chester, Liverpool, Port Sunlight, Stratford-on-Avon, etc., and receptions will be held in honour of the visit by the Lord Mayor of Birmingham and Sir William Lever. At the Hampstead Garden Suburb the residents will perform a pageant entitled "The Mystery of the Valorous Knight St. George, and the Slaying of the Great Dragon." The subjects of discussion include "Co-partnership Housing and Garden Suburbs," "Town Planning," "Industrial Villages," and "Municipal Housing." An extension tour in Scotland has been planned, lasting from 18th July to 25th July, the itinerary including Edinburgh, the Western highlands, and Glasgow. Full particulars can be obtained from the Secretary, Mr. Ewart G. Culpin, 3 Gray's Inn Place, Gray's Inn, W.C.

University of London School of Architecture : Summer School of Town Planning.

The progress of the Town Planning Movement and the coming into force of the Town Planning Act have made it necessary for members of municipal bodies and those engaged in the offices of architects, municipal engineers, and surveyors to possess a knowledge of the subject which it is difficult for them to acquire. With the view of meeting to some extent this need, there was held in London in August 1912 and 1913 a Summer School dealing with the science and art of town planning, at which opportunities were provided for the study of the subject by councillors, professional men, and others.

It is found that those actually engaged as assistants in municipal offices, or with architects, surveyors, engineers, etc., may, without serious interference with their ordinary work, attend by means of a Summer School a thorough course of lectures by acknowledged authorities, dealing with different branches of the subject. The Summer School will, therefore, again be held in 1914, from 3rd August to 15th, in the new buildings of the University of London School of Architecture at University College, Gower Street, W.C. As practically the whole time will be given to the work of the school, it has been found possible to provide as complete a series of lectures as is often given in a much longer course. The following lectures have been arranged :—

The Practice of Town Planning : a Course of Lectures and Demonstrations by Mr. Raymond Unwin.

Town Planning in Foreign Countries and Past Times : six Lectures by Professor S. D. Adshad and Mr. L. P. Abercrombie.

The Town Planning Act, and other Legal Aspects of the Subject : three Lectures by Mr. E. R. Abbott.

The Engineering and Surveying Problems of Town Planning : four Lectures by Mr. G. L. Pepler and Mr. Chas. J. Jenkins.

The Financial Aspects of Town Planning.

Modern Town Planning in Germany. By Dr. A. E. Brinckmann.

Modern Town Planning in America. (It is hoped that this lecture will be given by Mr. John Nolen, Fellow of the American Society of Landscape Architects.)

Tradition and Civic Development. By Mr. H. V. Lancaster.

Arrangements will be made for board and lodging at the University College Hall, Ealing (near Ealing Garden Suburb), or in the Hampstead Garden Suburb. The inclusive fee for the lectures and demonstrations is 31s. 6d.; excursions and visits extra. Tickets for single lectures will be issued at 2s. 6d. each, or for the lectures on any one day at 5s., so far as accommodation allows. Applications for enrolment or for further information should be addressed to Mr. J. S. Rathbone, Joint Hon. Sec., Fitzalan House, Church End, Finchley, N.

University of London : Applications required for Professorship of Town Planning.

The Senate invite applications for the part-time post of University Professor of Town Planning tenable at University College. The salary will be £400 a year. The engineering aspects of town planning are dealt with by the Chadwick Professor of Municipal Engineering. Applications (twelve copies), together with the names of not more than four references, must be received not later than by first post on Monday, 22nd June, 1914, by the Academic Registrar, University of London, South Kensington, S.W., from whom further particulars may be obtained. Testimonials are not required.

HENRY A. MIERS, *Principal*.

University of Sheffield Department of Architecture : Summer Vacation Course.

For the Summer Course this year, in connection with the Vacation Courses of the Department of Architecture, Sheffield University, a Tour in South France is being arranged by the Lecturer, Mr. W. S. Furchon [A.], in conjunction with the Rev. Dr. West [A.], author of *Gothic Architecture in England and France*. The route arranged—a particularly interesting one—is London, Paris, Poitiers, Limoges, Périgueux, Cahors, Bournazel, Rodez, Albis, Toulouse, Carcassonne, Nîmes, Arles, Avignon, Orange, Le Puy, Isoire, Clermont Ferrand, Paris, London. The party will leave London on Monday, 31st August, and will arrive back in London on Thursday, 24th September. Every facility will be given, and the necessary permissions obtained for sketching and photographing. The fee for the course is 26 guineas (or 23 guineas starting and ending at Paris), which covers all the usual travelling and hotel expenses. The courses are open to all who are interested in the study of architecture. Any further information desired may be obtained from the Lecturer, Mr. W. S. Furchon, at the University.

The Protection of Ancient Buildings.

Mr. A. C. Benson, C.V.O., President and Fellow of Magdalene College, Cambridge, is reading a Paper entitled "The Beauty of Age" at a meeting of the Society for the Protection of Ancient Buildings to be held in the rooms of the Society of Antiquaries,

Burlington House, Piccadilly, on Friday, the 19th June, at 5 p.m. The Chair will be taken by the Right Hon. the Earl Ferrers, F.S.A. Cards of admission may be obtained on application to the Secretary, Mr. A. R. Powys, at the offices of the Society, 20 Buckingham Street, Strand.

The Allied Societies and Registration.

At a general meeting of the Royal Institute of the Architects of Ireland, held in Dublin on the 20th May, Mr. R. Caulfeild Orpen, R.H.A., *President*, in the Chair, the following resolution was adopted:— "That the members of the Royal Institute of the Architects of Ireland be furnished with a copy of the Bill drafted by the Royal Institute of British Architects, 1905, the Bill of the Society of Architects, 1913, the provisions of the proposed extended Charter, and the President's introductory address, and that the opinion of the members should be sought as to whether they approved the Bill or the Charter, and also whether the Irish Institute should support the British Institute in opposing the Parliamentary Bill promoted by the Society of Architects."

Memorial in Holland to the late Sir L. Alma-Tadema.

A memorial tablet to the late Sir L. Alma-Tadema, presented by the British Royal Academy of Arts and designed by Sir George Frampton, R.A., was unveiled recently at Dronryp, the artist's birthplace, in the presence of Sir Alan Johnstone, the British Minister at The Hague, and a distinguished company. Sir Alan referred to Sir Lawrence's merits as an artist and as a man, and also as the son of a country which had produced some of the most famous painters of the world. The tablet, which is of bronze, represents a knight in armour with a lance, symbolising strength; and a female figure, representing sympathy, holding a wreath. The inscription reads:—"Sir Lawrence Alma-Tadema, born in this house; buried in St. Paul's Cathedral, London. 1836-1912. A great painter, a brave worker, a strong friend." The tablet was accepted by Dr. A. Fockema, Vice-President of the Frisian Association, who expressed the thanks of his countrymen to the British people by thus honouring a native of his country who combined the best qualities of the two races.

OBITUARY.

Walter Liberty Vernon [*Fellow*, elected 1886], for many years Government Architect of New South Wales, died on January 17th last. Mr. Vernon was born at High Wycombe, Bucks, in 1846, and was educated at Westminster. In 1862 he was articled to Mr. W. G. Habershon, of Bloomsbury Square, pursuing his architectural studies meanwhile at the Royal Academy Schools under Sir Robert Smirke, and at the South Kensington School of Art. After completing his articles he was assistant for three years with Messrs. Habershon and Pite, and for a further three years with Mr.

Charles Moreing, of Spring Gardens. In 1872 he started practice at Hastings, and in 1880 opened an additional office at 26 Great George Street, Westminster. Among his early works were the Priory Street Schools and Institute, and the *Observer* Printing Office, Hastings, for Sir Thomas Brassey; the Royal Concert Hall, St. Leonards; the Electric Light Works, Hastings; and a large number of shops and private houses. Acting on medical advice he went to Australia in 1883 and started practice in Sydney, afterwards entering into partnership with the late W. H. Wardell. In 1890 he was appointed Government Architect of New South Wales. Among the many public buildings designed and carried out under his direction were the National Art Gallery, the Fisher Library at the University, the Mitchell Library, the Registrar-General's Offices, the Central Railway Station, the Albert and Victoria Wards of the Royal Prince Alfred Hospital, the Consumptives' Home at Waterfall, the Dental Hospital, the Australian Museum, the Treasury, the Custom House, etc. He also superintended the decoration of the City of Sydney at the inauguration of the Commonwealth and on other public celebrations. His department drew up designs for the erection of a new Parliament House at the cost of £520,000, but the work remains in abeyance. Mr. Vernon took a great interest in the militia, joining the New South Wales Lancers in 1884 as a trooper, and, passing through all grades, he retired a few years ago as Lieutenant-Colonel. He was in command of the troop of Lancers who came to England to take part in Queen Victoria's Jubilee.

CORRESPONDENCE.

Modern Clergy as Church Architects.

Adelphi, W.C.: 5th June 1914.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—I send a short account, from the *Church Times* of June 5th, of the Annual Meeting of the Incorporated Church Building Society, which is interesting. Especially interesting are the observations made by the seconder of the resolution in support of the society; and though they will be read, doubtless, by a large circle, there can be no harm in repeating them in the JOURNAL for the benefit of "modern architects" who may not see the *Church Times*.—Yours faithfully,

HARRY SIER.

In just under a hundred years a sum of £950,456 has been expended by the Incorporated Church Building Society by way of grants in aid. This sum relates to nearly 10,000 churches.

In an address yesterday week at Church House, Westminster, on the occasion of the annual meeting of the society, a suggestion was thrown out by Mr. F. L. Pearson that a diocese in any scheme for church building should provide that at convenient centres (one at least in every rural deanery) there should be one church on the "grand scale." He did

not mean necessarily costly buildings, with much carving and a wealth of detail, but that every parish should use the cathedral type to emphasize the fact that it was dignity, harmony, and sincerity which contributed to the making of a fine building.

Mr. Athelstan Riley, in moving a resolution in support of the society, said no one in these days would think of putting up a civic building such as the Law Courts in the Gothic style. No doubt the Gothic revival was dead. He did not in any way wish to shock his conservative friends, but they had to face the fact that there was such a thing as reinforced concrete, and they were using that material for some of their mission halls.

In seconding the motion, Sir Edward Grant-Barls reminded the meeting that the clergy were the architects of the eleventh and twelfth centuries—architects of buildings which no modern architects could equal or improve upon. If some of the modern clergy could be induced to devote their spare time to church building there might be a combination of beauty with utility that would be of advantage to the Church at large.

The resolution was carried.

The total income for the year was £9,199, as compared with £6,880 in 1912.

The Licentiates and the Proposed New Charter: The Use of the Affix.

3 Queen Street, Cheapside, E.C.

4th June 1914.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—The letter in your issue of May 23rd last is not likely to be the only protest made by Licentiates against the idea of differentiation in the Register. Had I thought it at all likely that the Privy Council would listen to such a suggestion, I should myself have protested; but Mr. Wrench, Mr. Winder, and the Licentiates of the Sheffield District may, I think, rest assured that if a Charter is given it will not be on the terms set out in Clause 1 of the proposed Charter. There seems to be a sad lack of *esprit de corps* in the profession when such proposals are seriously put forward. By admitting us as Licentiates, the Institute has acknowledged our right to live by our profession, and a Register of qualified men is for that purpose, and not to glorify a certain number of those on the list because they possess certain other distinctions, such as having passed examinations at the age of 20 or 25 which they could not pass at 40 or 45, but which they want to force upon others, or else deny them full registration. It is hard to believe that these proposals are made for the future benefit of the profession; they look too selfish at present.

As regards the use of the affix, the Council state in their Annual Report that "frequent cases of violation by Licentiates of their undertaking on election only to use their affix in full having been brought to the notice of the Council, the subject was referred to the Committee, who have recommended that a reminder as to the penalty attaching to breach of this undertaking should be prominently published in the JOURNAL, and that a request be issued to the professional press inviting their co-operation in the observance of this regulation." Surely the Committee which made such a recommendation must be

composed of very young men, fresh from the honours of what was to them a great triumph?

I have never been able to understand the frame of mind of those who guided the Institute during the period Licentiates were admitted which led them to impose the undertaking upon Licentiates "to use their affix in full." Had I recognised at the time that such an undertaking was to be imposed I should have hesitated to apply for admission—not because I want to write "L.R.I.B.A.," instead of "Licentiate R.I.B.A.," but because I would not enter into an undertaking which is so easily and quite unconsciously broken. The only occasions upon which I have used an affix have been when it has been the easiest method of description, in giving a testimonial for the benefit of another, or in certain correspondence in the press where the affix conveys some meaning.

Is it not, may I ask, a rather childish policy to admit a number of men to membership of a qualified kind, and then to take every opportunity of trying to make them understand that they are "not as other men are"? It seems to me that if the Institute wishes to keep its place of precedence it will only do so by adopting a policy of real co-operation amongst members of all classes, including even Licentiates, and by giving every class all the "kudos" it can.

Why, again, should the professional press be invited to regard a large number of practising architects of many years' standing as of less consequence than the young man just out of his articles who has managed to pass the examination for Associateship? It is only quite recently that I have again recognised the dreadful fact that there is a penalty attaching to the use of the letters L.R.I.B.A., for I had quite forgotten it, although I must have known it, I suppose, when admitted as a Licentiate. Can you give the reasons why such a penalty was imposed? They ought to be interesting.—Faithfully yours,

JOHN E. YERBURY, F.S.S., *Licentiate*.

Licentiates and the New Charter.

St. Pierre, Mount Ephraim Road, Tunbridge Wells.

26th May 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—In common with others, I sincerely trust that the letter of Messrs. Houlton, Wrench, and Francis Winder, in your last issue, preferring the claim of Licentiates to be admitted to the ranks of Chartered Architects, will receive proper consideration at the next "Registration" meeting.

It is very surprising to some of us Licentiates to observe the deprecatory, I was almost saying contemptuous, manner with which some members regard and would treat us. After the investigations, submission of drawings, and proofs of eligibility demanded from the candidate before admission to the Licentiateship—to use the words of one of the Council, "after most exhaustive inquiries as to their qualifications"—and then encountering such treatment and a belittling attitude as recently exhibited, it is scarcely surprising that many of us are wondering if, after all,

we were wise or studying our best interests in seeking admission to the Institute; whether it would not have been as well for us to have thrown in our lot with the Society of Architects, where at least there is unanimity in regard to our object—viz., the protection of the *bona-fide* qualified architect, and no contentious or bickering sections.

One fact should be borne in mind, that without the Licentiate class very little could be done in the way of registration.—Yours faithfully,

HENRY ELWIG, *Licentiate*.

MINUTES. XV.

At the Fifteenth General Meeting (Business) of the Session 1913-14, held Monday, 8th June 1914, at 8 p.m.—Present: Mr. Reginald Blomfield, R.A., *President*, in the Chair, 64 Fellows (including 20 members of the Council), and 188 Associates (including 5 members of the Council)—the Minutes of the Meeting held 18th May 1914, having been published in the *JOURNAL*, were taken as read and signed as correct.

The Hon. Secretary announced the decease of Ernest George Allen and George Tinniewood, *Licentiates*.

The following Associates attending for the first time since their election were formally admitted by the President—viz., Herbert Hartmann, H. Saxton Besant, S. J. Bridges Stanton, Cecil W. Rogers, Edward Smith Coldwell, Percy M. Andrews, B. P. Gaymer, G. Howard Jones, Gilbert Fraser (President of the Liverpool Architectural Society), W. A. Rutter, and J. Garnet Hands.

The Secretary having read the reports of the scrutineers appointed to direct the election of the Officers, Council, and Standing Committees for the year of office 1914-15, the President declared the members duly elected to the respective offices, and, on the motion of the President, seconded by Mr. Leonard Stokes, *Past President*, a vote of thanks was passed to the scrutineers for their labours in connection with the elections.

Mr. Leonard Stokes moved, and Mr. J. S. Naylor [A.] seconded, that the names of unsuccessful candidates be not published.

An amendment by Mr. E. A. Jollys [A.], seconded by Mr. H. Hardwicke Langton [A.], that the names of unsuccessful candidates, together with the number of votes polled, be published in the *JOURNAL*, was put to the vote and lost—80 voting for, 86 against.

Mr. Stokes's proposal was then put to the vote and defeated—84 voting for, 108 against.

An amendment by Mr. Alexander N. Paterson [F.], seconded by Mr. G. A. Lansdown [F.], that the names be published but not the numbers, was put to the vote and agreed to.

The following candidates were elected by show of hands under By-law 10—viz. :—

AS FELLOWS (14).

CHURCH: Guy [A. 1903].
FOSTER: Thomas Oliphant [A. 1913] (India).
JAGGARD: Walter Robert [A. 1895].
KIRKLAND: John [A. 1899].
LUCAS: John Archibald, F.S.I. [A. 1906] (Exeter).
MORRIS: Henry Seton [A. 1909] (Burma).
YOUNG: George Penrose Kennedy [A. 1885] (Perth).

together with the following Licentiates, who had passed the Examination qualifying for candidature as Fellows :—

BUCKLAND: Herbert Tudor (Birmingham).
CLAY: George Felix Neville, B.A. Cantab.
DEACON: Basil Charlton.
FOSS: John Henry Beart.
HALLEY: James Mitchell White.
HAYWOOD-FARMER: Edward (Birmingham).
LINES: Roland Walter (Canada).

AS ASSOCIATES (14).

COOPER: James Gough [S. 1907] (Bolton).
FETHERSTONHAUGH: Harold Lea [Special] (Canada).
HARRIS: Philip Capes [S. 1910].
HEDLEY: George Ernest [S. 1909] (Toronto).
JONES: George Howard [S. 1905].
MORLAND: Geoffrey [S. 1904] (Bromsgrove).
McDOUGALL: James Cecil, B.Sc., B.Arch. [Colonial] (Montreal).
PECKHAM: Arthur Nyton [S. 1907] (India).
POCOCK: Percy Willmer, Jun. [S. 1909].
RHODES: Wilfred Craven [Colonial] (Toronto, Ont.).
ROARTY: Stanislaus [Colonial] (Sydney).
SCOTT: Theodore Gilbert [S. 1910] (Norwich).
SMITH: Edwin, P.A.S.I. [S. 1907] (S. Wales).
SYMMONDS: William [Colonial] (Montreal).

AS HON. ASSOCIATE (1).

PORTAL: Sir William Wyndham, Bart., M.A. Oxon., F.S.A., D.L., J.P. (Hants).

AS HON. CORRESPONDING MEMBERS (2).

BRUNFAUT: Jules A. E., Vice-Directeur de la Classe des Beaux-Arts de l'Académie Royale de Belgique (Brussels).
GRAM: Ralph Adams, Litt.D., F.A.I.A., F.R.G.S. (Boston, Mass.).

The Hon. Secretary announced the receipt of books presented to the Library [see *Supplement*], and the cordial thanks of the meeting having been passed to the donors, the Business Meeting terminated.

ADJOURNED SPECIAL GENERAL MEETING (REGISTRATION).

At a Special General Meeting for the consideration of the Council's proposals for a new Charter and By-Laws, adjourned from the 27th April 1914, and held Monday, 8th June, following the Business Meeting above recorded, and similarly constituted:

The President answered questions put by Mr. Sylvester Sullivan [A.] regarding the present attitude of the Allied Societies with respect to the scheme of Registration by Charter.

Mr. W. Henry White [F.] moved, and Mr. J. S. Naylor [A.] seconded, the adoption of Clause 8*—viz., "Representation on this Standing Committee and for the specific purposes only as defined in Clause 7 to be given to Licentiates. In all other regards the constitutional position of the Licentiates to remain as at present."

An amendment by Mr. C. Stanley Peach [F.], seconded by Mr. Adam Watson [F.], to insert the words "and Registered Architects not being corporate members or Licentiates" at the end of the first sentence, was put to the meeting and lost, on a show of hands.

An amendment by Mr. S. Douglas Topley [A.], seconded by Mr. Horace Cubitt [A.], that Clause 8 be referred back to the Council for further consideration was carried—122 voting for and 107 against—and was then put as the substantive motion and declared carried without a count.

A motion at this point for the adjournment of the meeting was negatived.

The President ruled that Clause 9 depending upon Clause 8 could not be discussed and must go back to the Council with Clause 8.

Mr. Stanley Peach moved and Mr. W. Henry White seconded Clause 10, dealing with the constitution of the Council.

Mr. Sydney Perks [F.] moved and Mr. Douglas Topley seconded the following amendment: "That Clause 10 be referred back to the Council for further consideration, a revised clause to be submitted to the General Body at an early date—it being distinctly understood that the members of Allied Societies are not to have larger representation on our Council than our own Associates."

A discussion having ensued, in which several members took part, a motion by Mr. George Hubbard [F.], seconded by Mr. Max Clarke [F.], for the adjournment of the debate was carried, and the meeting terminated at 11 p.m.

* Clauses 1 to 7 were disposed of at the previous meeting. [*JOURNAL*, 9th May.]



THE ROYAL GOLD MEDAL 1914.

Presentation to M. JEAN LOUIS PASCAL, Member of the Institute of France,
Commander of the Legion of Honour, Hon. Corresponding Member R.I.B.A.,
at the General Meeting, Monday, 22nd June 1914.

ADDRESS BY MR. REGINALD BLOMFIELD, R.A., F.S.A., *President*.

LADIES AND GENTLEMEN,—We have met to-night to pay honour to one of the most distinguished living architects, M. Jean Louis Pascal. To some extent the ceremony will resemble Hamlet without the Prince of Denmark, because, owing to his advanced age, M. Pascal has been forbidden by his doctors to make the journey from France. M. Charles Roux, however, Secretary to the French Embassy, has been good enough to come here to-night to receive the Medal on M. Pascal's behalf, and to read the very interesting Address that he has sent us, and which he, of course, would have read himself had he been able to be present. I have myself received a letter from M. Pascal, which I will read to you.

"Almost up to the last moment," he writes, "I hoped to be able to reply to the kind invitation of my British colleagues by presenting myself in person at the Institute on June 22nd, to receive from your hands the grand Gold Medal awarded this year, with His Majesty's approval, for the services which my long practice of architecture is supposed to have rendered to our art. Only a week separates us from this ceremony. It is one which is very moving and honourable for me, and I should fear to shock you by failing to appear at the last moment. It is only prudent, out of regard for you and those who will be present at this meeting, a meeting which affects other interests as well as mine, that I should not expose you to any such risk. My doctor this morning could not reassure me as to my undertaking the journey. I must therefore give up the idea, and send you this explanation, with an expression of my profound regret at being absent, and at having to reply so ill to the feeling of brotherhood which has found for me at my great age this expression of esteem of which I am so proud and for which I am so grateful."

This letter in its courtesy and charming modesty is characteristic of M. Pascal. The services which he has rendered to architecture, and of which he speaks in such depreciatory tones, have won him the esteem of architects in every country, and in England his name has long been a household word

among architects. M. Pascal was born in Paris in 1837; he was educated in the Beaux-Arts and in the atelier of M. Questel, where he met his and our old friend, Richard Phené Spiers. Mr. Spiers, I suppose, is nearly his contemporary, and probably for the same reason he is unable to be with us to-night. In 1866 M. Pascal won the Prix de Rome, and from 1866 to 1870 he was at the Villa Médicis, returning, I suppose, at the end of that year, or early in the next, to France. You will note that



BIBLIOTHÈQUE NATIONALE, PARIS.

M. Pascal's training was thus in a sense continued up to the age of thirty-three; and this is a fact that I think should be noted in these days of rather superficial training. On his return from Rome he was appointed auditor of the Conseil Général des Bâtimens Civils, and Inspector of Works under Lefuel at the Louvre and the Tuileries; an excellent example, which I hope to see some day followed in England, of the French method of selecting the most brilliant of their young men for official employment. The essential thing is that our brilliant young men, when they return from our new school at Rome, from which we hope such great things, should find some official employment which will not deprive them of their individuality nor submerge them in the official net.

M. Pascal's career was now assured. He became Patron of his atelier in 1872, was appointed assessor in public competitions, became Vice-President of the Con-

seil Général, a member of the Council of the Beaux-Arts and President of the Jury, and also President of the Jury of the Salon, becoming finally a Commander of the Legion of Honour, Officier de l'Instruction Publique, a Member of the Institute of France, and Inspector-General of Civil Buildings.

In addition to all these official employments, he was busily engaged in the practice of his art, on monuments to distinguished Frenchmen, on domestic and civil architecture, and particularly on that very fine work recently completed, the addition to the Bibliothèque Nationale. In spite of these multifarious engagements, M. Pascal has found time for literary studies of architecture.

This is a side of our work which, I am afraid, is unduly neglected. When you get a man of M. Pascal's attainments applying himself to literary work, the result becomes extremely valuable not only to his own countrymen, but to architectural students the world over. I would mention in this connection M. Pascal's labours, in conjunction with M. Guadet, for the splendid edition of Blondel's *Architecture Française*.

All M. Pascal's work is marked by fastidious scholarship, the distinction and simplicity of manner which is the fit expression of a natural genius for architecture, guided by profound knowledge. And apart from his work as an architect and a writer, there is his work as a teacher. I have mentioned that Pascal became Patron of an atelier in 1872. I wonder how many fine architects—French, English, Scottish, American—owe their training to Pascal during the forty years since he opened his office. If he had been able to be with us to-night, if he had been able to visit that fine addition which Sir John Burnet has made to the British Museum, I am convinced he would have felt that his training had not been in vain. And, by the way, I should like to offer my sincere congratulations to Sir John Burnet on the well-deserved honour which, as announced in the papers this morning, has been conferred upon him.

I find on looking through the list of Gold Medallists that no fewer than ten of M. Pascal's countrymen are already on our roll of honour, and I hope our colleagues in France will regard the award as renewed testimony of our appreciation of the architecture of their great country. At the recent



BIBLIOTHÈQUE NATIONALE, PARIS. J. L. Pascal, architect.

Exhibition of British Architecture in Paris we found that the work of our architects received most generous recognition from our French confrères. If, as I hope, they will return the visit next year, I feel sure that they will find the same feelings of appreciation and sympathy and admiration evinced towards them by their colleagues in England. In nominating M. Pascal for the Royal Gold Medal this Institute not only honours a most worthy representative of the splendid school of French architecture, but it also expresses in the most emphatic way its admiration of the high personal and artistic qualities which have won for M. Pascal the distinguished place which he occupies among contemporary architects.

M. Roux, I hand over, through you, to M. Pascal, the Medal which is presented by His Majesty the King on the nomination of this Institute.



FACULTÉ DE MÉDECINE, BORDEAUX. J. L. Pascal, architect.



CHÂTEAU DU DOUX, AITILLAC, CORRÈZE. J. L. Pascal, architect.

M. PASCAL'S REPLY.

LADIES, MR. PRESIDENT, GENTLEMEN,—Although in your invitation you kindly gave me permission to speak in my native tongue, it would have given me even greater pleasure had I been able to express my deep gratitude in the English language.

I should have liked on this eventful day of a long life, not unacquainted with anxieties and disappointment, to have shown my joy in a manner which could have been fully understood by all. It is for this reason I cannot resist the temptation of saying how grateful I am to my English colleagues for having considered me worthy of such honour, although my sole claim is to be found in a life of hard endeavour in furthering the interests of our beloved art.

MESDAMES, M. LE PRÉSIDENT, MESSIEURS,—Ma première visite à Londres est bien lointaine, en 1851. J'étais un jeune garçon et pour la première fois votre bonne grâce hospitalière—dont je ressens les effets aujourd'hui—se traduisait dans une famille en amitié avec de petits camarades, des garçons et des filles qui ont tous disparu, auxquels nous nous efforcions de rendre à Paris ce qui m'avait touché si profondément pour cette première sortie de mon pays.

Bien que mes souvenirs d'alors me représentent avec la vivacité des premières impressions des visites à Windsor, à Hampton Court, à Oxford, à Cambridge, aux Palais de Londres, à ses parcs, à ses musées, à ses théâtres, il n'était guère question d'architecture entre nous, encore qu'un goût qui commençait à se manifester pour les choses de la littérature et de l'art m'eût fait apprécier et fixer dans ma mémoire les œuvres alors encore presque récentes du Palais du Parlement dont je vis l'auteur, Sir Charles Barry et son fils.

Pendant d'autres vacances je revins à Londres, et les noms d'architectes éminents auxquels



MONUMENT TO DESHAYES IN THE ÉCOLE DES BEAUX-ARTS.



MONUMENT TO CHARLES GARNIER, PARIS.

J'eus l'honneur d'être présenté pourraient me faire considérer comme un revenant, traitant de personnalités de l'autre monde, si je ne tenais à énumérer ces souvenirs, parce qu'ils fixent un état d'esprit qui ne m'a point quitté, ayant reçu une forte empreinte à un âge où les émotions sont profondes et par suite durables. C'est ainsi qu'il me fut donné de voir de loin et bien haut des artistes comme ceux que je cite au hasard : Ashpitel, Owen Jones, Digby Wyatt, Alfred Stevens, Donaldson, Cockerell, Penrose ; d'en entendre, quatre ans plus tard, en 1855, à l'occasion de nos grandes Expositions de



MEMORIAL TO MICHELET, PÈRE LACHAISE, PARIS.

Paris, fraternisant avec nos Gilbert, Hittorff, Lefuel, Baltard, Lebas, Duc, Labrousse et, plus tard, en 1867 avec Questel, Garnier et d'autres célébrités.

Plus tard ce fut l'esprit de curiosité, l'amour des renseignements sur ce qui se produisait à l'étranger dans l'art spécial que j'avais embrassé, la recherche des méthodes d'étude si différentes suivant les nationalités et l'esprit qu'elles y peuvent apporter qui continua à me tenir en éveil sur les productions de votre art.

Même, il y a quelque trente ans, une mission du Gouvernement français me fit visiter jusqu'au Nord de l'Ecosse les édifices consacrés à l'enseignement de la Médecine, à Edimbourg, où s'achevait une école, jusqu'à Aberdeen, jusqu'à Inverness, et j'en rapportai une plaquette publiée avec quelques dessins au moment où commençait l'exécution de la Faculté de Médecine de Bordeaux, que je complète actuellement par la Faculté de Pharmacie, ma dernière œuvre sans doute, ceci sans la mélancolie à laquelle je faisais allusion en commençant.

C'est à cette période que je rapporterai les occasions de connaître, d'entrevoir, MM. Aitchison, Alfred Waterhouse, Sir Arthur Blomfield, Pugin ; et bien longtemps après encore ce fut inversement l'appel fait à notre

compétence qui me fit participer avec Norman Shaw, à Anvers, à la première partie du jugement du concours Phœbe Hearst de San Francisco, me donnant occasion plus tard à une cordiale réception dans l'habitation privée de ce grand architecte. La suite nous mena plus loin—jusqu'en Californie, avec celui qui lui fut substitué, dans l'intimité du même train, du même wagon, à l'aller et au retour, avec votre ancien et tant regretté Président, John Belcher, et son aimable femme.

J'aurais à peine les noms de Sir Aston Webb et quelques autres à inscrire dans la liste de mes souvenirs s'il ne me tenait à cœur de rappeler les rapports toujours sympathiques que j'ai noués

avec vos compatriotes parmi lesquels plus que les rapports, l'amitié me dicte de citer le nom de Spiers, mon vieux camarade d'étude à Paris, Spiers que ses dessins, ses relevés, ses belles aquarelles maintiennent dans votre estime, avec son goût pour l'enseignement qu'il n'a jamais abandonné et que, moi aussi, je pratiquai pendant une période en quelque sorte invraisemblable, depuis 1872, date à laquelle j'ai succédé à mon maître, celui de Spiers, M. Questel.

Ceci m'a encore maintenu dans le milieu anglais, écossais—sans parler du milieu américain, dont l'Institut des Architectes m'a témoigné de sa sympathie presque en même temps que vous, messieurs, par une médaille analogue.

Vous savez que nous ne séparons jamais chez nous la pratique de notre art et son enseignement et que tous nos professeurs sont des architectes en exercice. Et c'est ainsi que, vieux maître, je pourrais encore citer comme ayant figuré récemment à votre belle Exposition, si appréciée de vos collègues français, des noms d'anciens disciples comme Burnet, dont la bonne grâce pour son patron a été inlassable, avec plusieurs Ecossais ou Anglais qui ont maintenu la tradition, et que je pourrais encore nommer des élèves ayant obtenu votre prix de Rome, fidèles aux mêmes antécédents.

Si je me suis étendu aussi longuement sur cette question, en ne vous parlant que trop de ma personne, c'est, messieurs, que dans l'attribution de la haute récompense que vous accordez sous les auspices de

sa Majesté le Roi, récompense pour laquelle je dois vous manifester ma profonde reconnaissance, les services que j'ai pu rendre à l'enseignement sont notés de façon toute spéciale dans ma carrière.

Ce serait pourtant contredire la vérité que de leur donner une importance dominante, et vous me permettez, en élargissant le cercle de cette réponse, de glorifier dans sa pratique notre noble profession, ayant été le collaborateur de Questel, de Lefuel, surtout de Garnier pendant cinq ans, de préférer la production à toute spéculation théorique et de vous féliciter de la haute dignité dans laquelle elle paraît être tenue ici encore plus que chez nous.



MAUSOLEUM, CEMETERY OF MONTPARNAISE, PARIS.

Pays de la liberté, vous ne gagneriez rien, comme dans certaines contrées d'esprit très moderne par ailleurs, à réglementer l'exercice de cette profession. A tous risques, il convient qu'elle continue à être libre, laissant aux résultats obtenus le soin de séparer l'ivraie du bon grain.

Elle laisse peser sur un seul les responsabilités de beaucoup—dans la conception première, vis à vis des programmes que souvent nous avons à constituer parcequ'on ne nous les donne qu'incomplets et contradictoires, vis à vis des administrations, des particuliers, ne trahissant jamais le mandat de confiance qui nous est accordé, mais cherchant le moyen de proportionner, de mettre en ordre, ce qui y figure pour transformer en œuvre d'art l'œuvre d'utilité qui nous est confiée.

Dans les monuments nationaux, les glorifications de la guerre, de la paix, dans les palais, dans les musées, dans les édifices religieux, ceux de l'ordre le plus élevé, toujours la responsabilité la plus sévère, même si elle semble disparaître dans les inaugurations et les cérémonies officielles, pèse sur nous. Elle est d'ordre supérieur, et partout il nous faut, sans perdre le sentiment de l'ensemble, des aspects généraux, la subir dans le moindre détail, couvrant celle de nos collaborateurs, de ceux dont le rang est le plus près de nous comme des plus humbles participants aux œuvres qui portent notre signature.

Votre noble nation traduit dans l'attribution de cette médaille à des étrangers le sentiment d'ordre supérieur qui vous anime à cet égard en demandant à sa Majesté le Roi de sanctionner votre vote, vous donnez à cette récompense une telle valeur qu'il m'est impossible d'imaginer comment, m'attribuant cette responsabilité morale, on est venu me chercher dans ma modeste sphère pour prendre rang auprès de tant d'artistes indigènes ou du dehors dont les noms figurent dans notre armorial moderne.

Ayant peu de temps à vivre, je ne saurais m'appuyer sur cet hommage pour éléver—en vue d'œuvres à produire ma bonne volonté et mon courage à la hauteur de l'illusion que vous vous êtes faite, messieurs, de mon passé. Il n'y a plus d'avenir pour moi, et je ne puis que me montrer profondément reconnaissant de la recherche que vous avez bien voulu faire pour me sortir en si haute compagnie, et vous en remercier du plus profond de mon cœur.

J. L. PASCAL.

VOTE OF THANKS.

SIR JOHN BURNET, LL.D., R.S.A. [F.]—Mr. President, Ladies and Gentlemen, it is my privilege to move a vote of thanks to His Excellency, the French Ambassador, for so kindly deputing M. Roux to read M. Pascal's message to us on receiving the highest honour which it is in the power of this Institute to confer. Before formally doing so, if you will bear with me, I would like, as an old pupil of M. Pascal and one who is still in close communication with him, to say how very keenly he regrets that the state of his health and the responsibilities of his practice render it impossible for him to be with us to-night. Only last week he wrote me that he had decided to come, but his letter had evidently been sent off without consulting his doctor, as two days later he informed me that he was not to be permitted to make the journey. The President has told you something of the work of M. Pascal and the reason why the Institute submitted his name as worthy to receive the medal with which His Majesty so graciously associates himself. But when I tell you that there is scarcely one country in Europe, in the East or in the West, in Canada or the United States of America, in which there is not a pupil of M. Pascal, either practising architecture or as a Professor of Architecture or of technical training, you will readily understand that we members of the Royal Institute of British Architects feel that we are honouring ourselves in honouring him. The Atelier Pascal is no recently established studio. From Monsieur Delespine, in 1800 to 1825, it has continued under the guidance of such men as Blouet, Duban, Gilbert and Questel, till in 1872 Pascal, one of Questel's pupils, became Patron. Six times "Logiste" (competitor for the Grand Prix), Pascal was twice second Grand Prix, and finally, in 1868, gained the prize itself. Working with

Garnier, the distinguished architect of the Opera House, in Paris, he still found time to enter competitions, and in 1872 his design took first place in the competition for the reconstruction of the Hôtel de Ville. In 1874 he gained second place for the church of the Sacré Cœur, on the heights of Montmartre. Finally, in 1876, his design for the Faculté de Médecine at Bordeaux was accepted, and he is now engaged on its completion, and that building, together with the extension of the National Library of France, will remain monuments of that largeness of heart, wide sympathy and indefatigable energy which have won for him the admiration and affection of his colleagues, clients, craftsmen, and pupils. It is these qualities which have made his work, to those who see, no mere buildings, but in mass as well as detail, eloquent of the close interest he took in his clients' needs, his sympathy with the characteristics of each craft, and of his respect for the individuality of each pupil. But, ladies and gentlemen, I, too, like M. Roux, am here to fill a place. Had Mr. Phené Spiers—known to you all as the late Master of the Royal Academy Architectural School, and so affectionately referred to in M. Pascal's message—been able to be here, he would have spoken to you of M. Pascal better than I can do as his comrade in the studio of M. Questel; he knew him intimately, and it is a source of great regret to me that his state of health did not permit of his being present. Had M. Pascal been able to be with us, there are many of his pupils from both England and Scotland who would have been here to welcome him, but it is pleasant to think that what we do to-night has the heartfelt approval of so many architects without and within the fold of this Institute. I might tell you much more about M. Pascal, but I must not allow the enthusiasm of the pupil to carry me further. I have said enough to prove to you the importance to us all of M. Roux's mission and to warrant you giving him a most cordial and hearty vote of thanks for the admirable and gracious way in which he has fulfilled his duty.



THE BEAUTY OF AGE.

Extracts from a Paper by Mr. A. C. BENSON, C.V.O., President and Fellow of Magdalene College, Cambridge, read before the Society for the Protection of Ancient Buildings, 19th June, 1914.

I AM going to attempt to say a few words about the beauty of ancient buildings, what it consists in, how we are to recognise it, how we are to preserve it, and why we must try to recognise and preserve it.

An old and beautiful thing has two quite distinct kinds of beauty, though it is not always easy to say where one begins and the other ends. It has original design and conception, which Ruskin rightly says ought to be called expression, and which is, technically speaking, the classical quality in beauty; it has also the beauty of Association, a varied and slowly acquired thing, which gradually draws into itself all sorts of interests and delights, deposited, as Pater says, cell upon cell; and this beauty of association is definitely a romantic beauty, not a question of form and proportion, but a power of evolving a sort of spiritual music, in which themes and motifs outline themselves for an instant and disappear again.

What I propose to speak of to-day is the power of Association; and though in one sense it cannot be called beauty pure and simple, yet it is a very real and true sort of beauty, though a complicated one, in the sense that it appeals to the spirit with a subtle and delicate sort of charm, and awakens all sorts of remote and musical echoes in the soul, like the music which lingers round vaulted roofs, when the organ utters the last huge chords of the high-piled symphony, and sinks into an awe-struck silence.

But the main difference is this, that the beauty of Expression of which Ruskin speaks is a thing in itself, as distinct as Higher Mathematics; an absolute quality, depending upon some hidden psychological law, which tells even the untrained mind what is in due proportion and what is not—while the beauty of Association is a subjective thing, contributed to a great degree by the spirit of the individual man who perceives it. The more highly stored that the mind behind the eye is, the more rich its memories, the more deftly and swiftly that it summons up and applies its garnered impressions, the more that it knows and feels, the more fertile and accessible its sympathies are, by so much the more appealing does the romantic force of Association become.

I have lately been spending a fortnight in the Cotswold country, which I first discovered by accident on a bicycle tour thirty years ago. My first find was Burford, that astonishing little town, with its Gothic, Tudor, Jacobean, Renaissance, and Classical houses, all more or less local products, I suppose, but distinguished at every date by an infallible touch of style, and all built out of that creamy orange oolite which cuts so easily and so sharply, and weathers so finely and with such diversity of colour. The interest of that little town is that it shows a strong tendency at every date to try experiments. It is dominated by no traditions. When I first saw it the great manor-house behind the pillared gates was ruinous, and there was an almost riotously Cinque Cento chapel attached to the house, out of the rose-window of which the ivy sprawled, dis-jointing the stones. . . . At a later date I found out Broadway and Chipping Campden—the latter being I believe the most interesting and beautiful little town in England; I saw Stanway, with its Inigo Jones gatehouse, and many of those fine secluded manor-houses, among bare

stone-built hamlets, in the long, cold valleys, with their spare faintly tinted turf slopes, and the clear cressy streamlets sparkling by low bridges and weathered garden walks.

But now the Cotswolds are discovered, as they say, with a vengeance. There is a secluded combe, which I found some fifteen years ago, on a warm, soft spring morning; up the steep road I went, into the green folds of the little valley, and the high hanging woods winding steeply into the hill. There was a church, with a sombre manor-house close by, a mere homestead evidently, with all the pleasant litter of byre and poultry yard close about the house, which held up its gables and chimneys over a plum orchard. Close beside this was an old fifteenth-century rectory half-buried in laurels. It looked as if time had gone to sleep there; and the Spring scents in the air, the songs of birds breaking from the thickets, the unselfconscious homely life of the place, as we wound up higher and higher, till we looked down on the grey roofs and chimney-tops far below, fixed it in my mind as a type of the perfectly beautiful places of the earth, with its own dumb appropriate life proceeding unregarded and undisturbed.

But what did I find there a month or two ago? A rich man—of exuberant taste, no doubt—has discovered it too; through the plum orchard a neat road winds, embanked with shrubs. The litter of the farm is cleared away, and a new wing of excellent design has thrown the old front out of proportion, while the whole hillside about the house is terraced into gardens and planted with yew hedges. The hamlet behind is one almighty mess. There is an excellent new circular well-house and some sympathetically designed stables; but there are also kennels and motor-houses, and great barns of corrugated iron. Numbers of old cherry trees have been cleared away; and, what is worse than all, an ineffable shabbiness, a sense of disgrace seems to have fallen upon the old cottages which still lurk among the ragged and mud-stained slopes.

But the saddest thing about these beautiful Cotswold villages is the condition of the churches. It is almost impossible to find an unrestored church. . . . The interiors have been scraped, cleansed, refurbished up, renovated—pews, woodwork, galleries have vanished in favour of neat deal Gothic seats; mean and commonplace reredoses have been inserted; many monuments have been removed, and frightful glass has been inserted. I remember ten years ago in one of the finest of the Cotswold churches falling in with the vicar, an excellent man abounding in energy and ecclesiastical bonhomie, who took me round his church with irrepressible pride. In the tower were piled up the pieces of a grand late seventeenth-century reredos. A broken pediment, columns, great oak panels, gilded urns, the ineffable Name in a glory. I do not suppose it could have been put up for less than a thousand pounds. I asked what it was. "The old reredos," he said cheerfully, "a hideous thing! The moment I set foot in the church, when I was appointed, I said to myself, 'Well, you have got to go!' Of course the people didn't like it—they said they were fond of it—but I used a little diplomacy, and went to work gradually; and now we have got something a little more in accordance with Christian feeling and Church tradition—and I am just waiting to sell it all to a dealer."

I looked at the east end. There was a poor flat alabaster reredos, with three compartments crowded with tasteless figures, and little blobs of bright-coloured crystals inserted, looking like jellies at a garden party . . . just a specimen

of the hybrid taste of vapid designers, sentimental, pietistic.

What is so deplorable about modern restoration is that it is all a submissive harking back to an arbitrary period of Church art. It is not a departure, it is a tame virtuosity, desiring, if possible, to reconstruct a vanished atmosphere, without any real knowledge of what that atmosphere actually was. The essence of the old building and decoration was to have a few fine dignified things on which the eye might rest with unsated pleasure, for ever discovering fresh beauties. But the new theory is to cover up everything with tawdry and flashy decoration, which gives perhaps a scenic sort of pleasure at first sight, and which breeds an ever-increasing disgust at the continued contemplation of its shallow trickeries.

I believe with all my heart in a beauty of strict form. . . . But I believe also in the immense interest and charm of development and accretion—what Ruskin calls Association. I like to see and to preserve the best that people could do, whether it is a gaudy Jacobean tomb crowded with obelisks and emblems and a stiff-ruffed figure in veined alabaster, or even a wigged divine clasping a marble book, among lachrymose cherubs and cinerary urns. Those who ordered and those who designed such things thought them beautiful; and nothing which has ever engaged the affections and devotions of human hearts can ever wholly lose its charm.

Anyone who has ever broken up a home and parted with familiar furniture must surely have had the feeling that the old chairs and tables are being unjustly used, and that they will not really ever feel happy with their new owners; and the love of a home is a complex thing, because a house has all the charm of a picture or a book, in that it is an expression of a human personality, a symbol of human desires and designs; and then it acquires too the secondary charm of having been the scene and witness of human adventures and events, so that the beam of the roof and the stone of the wall have become inseparably connected with human emotions and hopes and fears, and have a sanctity of which they cannot be divested, which even the prosaic Romans felt and rendered in the untranslatable phrase *admonitus locorum*—the spirit and influence of a place—the way in which a scene, which is associated with the horror of a calamity, or which has been the haunt of genius, can tacitly warn a human heart to forbear, to beware, to make a choice, or to follow a high example. That is the spiritual side of what I have called the beauty of age—its real and potent effect upon the emotions of men.

And then, too, in a less ethical and a more artistic region, there is the beauty which falls upon a building from the accommodation of all its mutual parts, through the touch of rain and sun, the pressure of wind, the strains and stresses of the earth, the movements of the soil, the slow passage of hidden streams, the thrust of burrowing tree-roots, the settling-down and distributing of the weights of wall and roof. When a building is first set up it has a mathematical rigidity and precision, as of a box of stone half embedded in a field. Then the slow process begins; here a softer passage of soil causes a settlement, a corner begins to shift away, and the rest of the house inclines a little to retain the fabric in its place; the roof timber warps and bends, and the tiles dip and waver in outline; all this is a pure gain, because the beauty of the underlying form is there, under the tiny deviations which relieve the eye from a too mathematical precision. The house leans and gathers

itself together, and at last comes to look, not as if it were set upon the soil, but had grown up out of it, like a rock or a tree. It is no longer an intruded thing, but a part of the scene. Meanwhile every surface is feeling the influence of the chemistry of the air; the sharp edges are softened, the lichen spreads its delicate patches, the sun bleaches the southern surfaces, the moss creeps along the sheltered ledge; the whole fades and glows into a soft harmony of colour and outline. I was looking the other day at what I believe to be one of the most beautiful of churches, the half-ruined Priory of Little Malvern, in its wooded background, with its shallow slender-shafted panelling; and I saw it to be a mass of delicately blended colour, purple and green and ruddy brown, an effect that can be produced by no calculation or nicety of art; and yet that particular effect, which no wealth can purchase and no skill can reproduce, is the very quality which the strong-minded restorer so ruthlessly casts away, not understanding that a rebuilt repointed furnished tower has nothing whatever of interest about it except the interest of a copy, an archaeological study. And this is the real horror of restoration, that this slow treasure of accrued beauty and charm is so dully sacrificed, and the gentle influence of centuries flung petulantly and ignorantly away.

So my first and last plea is that we should dare to let things alone, even if we do not understand them or think them beautiful, for the sake of the tender care which set them in their place, just so and not otherwise, and in the name of memory and reverence and love. For taste is a very changeable and inconstant thing, but reverence is eternal. The old house, the old church, ought to mean something to us, and we must not lightly change and deface them. Of course we must not let such emotions hamper our lives, and still less unfit us for harder and baser conditions. We ought not to grow more and more fastidious by experience, and if we find ourselves growing more and more disgusted and impatient if we cannot have things to our mind, then we are setting art before life, and not simply using it to enrich and strengthen life. If we are dealing with old and venerable things, we ought to do as little as we can to them; mending and repairing, but not what is called restoring. For a restored church is not a new church and it is not an old church—it is a new church without its originality, and an old church without its dignity.

And, if additions must be made for use and life, let them be frank additions, and not an attempt to fake what is old.

The beauty of age is very easily marred, and it cannot be imitated; and I am sure that whatever art is, it must be sincere. It is the emotion which art can give which makes it worth while; but it must be a real emotion, and not a bit of clever self-deception. A love of story-telling and character-moulding is typical of the decline of real emotion. As Milton said of the staircase of heaven,

Each stair mysteriously was meant.

There is a mystery and a meaning in it all. We do not know exactly what it represents, but we must do our best to interpret its meaning; and then we must be serious about art, if we are to get any help from it, but never solemn. It is being solemn about art when we try to make it produce fictitious effects just for the luxury of the emotion, but it shows a lack of all seriousness about it if we can misuse and deface a beautiful thing and destroy the rich beauty which only time and use and reverence can create.



9 CONDUIT STREET, LONDON, W., 27th June 1914.

CHRONICLE.

The Annual Dinner.

The Annual Dinner of the Royal Institute was held at the Hôtel Cecil on Wednesday, 17th June, the President, Mr. Reginald Blomfield, R.A., presiding. The company numbered 135, and included many distinguished guests. Invitations had been accepted by the Earl of Plymouth, the Earl of Crawford, Viscount Esher, and Mr. John Burns, but messages were received at the last moment that they were prevented from attending. Seated on the President's right at the high table were the Lord Mayor, Lord Redesdale, Mr. Joseph Pease, M.P. (President of the Board of Education), Sir Thomas Barlow (President of the Royal College of Surgeons), Sir Wm. Richmond, Sir Alfred Keogh, Sir Melvill Beachcroft, Sir Arthur Evans, Sir Lawrence Gomme, Mr. E. K. Chambers, C.B., and Mr. Alderman and Sheriff Lt.-Col. John Humphery. On the President's left were Sir Rickman Godlee (President of the Royal College of Surgeons), Sir Amherst Selby-Bigge (Secretary of the Board of Education), Sir Aston Webb, Sir Wm. Emerson, Sir James Linton, Sir Ernest George, the Dean of St. Paul's, Mr. Frank Dicksee, and Mr. Deputy and Sheriff Painter. Presiding at the lower tables were Mr. A. W. S. Cross, Mr. George Hubbard, and Mr. H. V. Lambchester (*Vice-Presidents*), Mr. J. A. Gutch (*Vice-President elect*), and Mr. Walter Cave. The following is an alphabetical list of the guests:—

Mr. Maurice B. Adams [F.]; Sir Thomas Barlow, Bart., K.C.V.O., President of the Royal College of Physicians; Mr. E. B. Barnard, D.L., Chairman Metropolitan Water Board; Mr. Ernest R. Barrow [F.]; Sir Herbert H. Bartlett, Bart.; Mr. Paget L. Baxter [A.]; Sir Melvill Beachcroft, Master of the Clothworkers' Company; Mr. R. Anning Bell, A.R.A.; Mr. T. P. Bennett [A.]; Mr. Reginald Blomfield, R.A., President R.I.B.A.; Sir Thomas Brock, K.C.B., R.A. [Hon. A.]; Mr. Charles W. Brooks [A.]; Mr. Walter Cave [F.]; Mr. E. K. Chambers, C.B.; Mr. Basil Champneys; Mr. H. Chatfield Clarke [F.], President of the Surveyors' Institution; Mr. Max Clarke [F.]; Mr. A. W. S. Cross [F.], Vice-President; Mr. K. M. B. Cross; Mr. Henry A. Crouch [F.]; Mr. C. F. W. Dening [F.]; Mr. R. Burns Dick [F.]; Mr. Frank Dicksee, R.A.; Lt.-Col. G. A. H. Dickson, M.V.O. [F.]; The Master of the Drapers' Company; Mr. Frank B. Dunkerley [F.], President of the Manchester Society of Architects; Mr. V. Annesley Edlin [Licentiate]; Mr. G. Leonard Elkington [A.]; Sir William Emerson, Past-President R.I.B.A.; Sir Arthur Evans, F.R.S. [Hon. A.]; Mr. A. F. Farish; Mr. E. H. Ford;

Mr. R. H. Fowler [Licentiate]; Mr. Percival M. Fraser [A.]; Mr. E. L. Fox; Mr. Edward Gabriel [A.]; Sir Ernest George, A.R.A., Past-President R.I.B.A.; Sir Rickman J. Godlee, Bart., President of the Royal College of Surgeons; Sir Lawrence Gomme, Clerk of the London County Council; Mr. H. B. Goodham [Licentiate]; Mr. J. A. Gutch, F.S.A. [F.]; Mr. Edward Greenop [F.]; Mr. L. Rome Guthrie [A.]; Mr. Thomas Hardy, O.M.; Mr. Ewen Harper [F.]; Mr. Edward Haslehurst; Mr. A. Ernest Heazell [F.]; Mr. B. Scott Holmes, Registrar of the Architectural Association; Mr. John Hooke, Master of the Carpenters' Company; Mr. Gerald C. Horsley [F.]; Mr. P. W. Hubbard; Mr. George Hubbard, F.S.A., Vice-President; Mr. Alderman and Sheriff Lt.-Col. John Humphery; The Very Rev. Wm. Ralph Inge, D.D., Dean of St. Paul's; Mr. Harry Osborn Jenkyn; Sir Alfred Keogh, K.C.B., Rector of the Imperial College of Science and Technology; Mr. Walter Lamb, Secretary of the Royal Academy of Arts; Mr. H. V. Lambchester, Vice-President; Mr. Walter Lawrence, Jr., President London Master Builders' Association; Mr. W. L. B. Leech; Sir James Linton, P.R.I.; Mr. Gilbert H. Lovegrove [Licentiate]; Mr. Henry Lovegrove [A.]; Mr. Bertram MacKenna, M.V.O., R.A.; The Lord Mayor; Professor Gerald Moira [Hon. A.]; Mr. Albert E. Murray, R.H.A.; Mr. David Murray, R.A.; Mr. W. A. Nelson; Mr. H. A. Newton; Mr. W. G. Newton [A.]; Mr. George H. Outley [F.]; Mr. E. G. Page [A.]; Mr. Deputy and Sheriff Frederick G. Painter; Mr. G. P. Parker, J.P., Mayor of Holborn; Mr. C. Stanley Peach [F.]; The Rt. Hon. Joseph Pease, P.C., M.P., President of the Board of Education; Mr. C. B. Peers, F.S.A., Inspector of Ancient Monuments; Mr. S. Perkins Pick [F.]; Mr. E. Turner Powell [F.]; Mr. Ambrose Poynter [F.]; Mr. A. N. Prentice [F.]; The Rt. Hon. Lord Redesdale of Redesdale, G.C.V.O., K.C.B.; Mr. J. Campbell Reid [F.]; Mr. F. G. Rice, President of the Institute of Builders; Sir William Richmond, K.C.B., R.A.; Mr. H. D. Searles-Wood [F.]; Sir Amherst Selby-Bigge, K.C.B., Permanent Secretary of the Board of Education; Mr. Herbert Shopperl, [A.]; Mr. Frederick Shingleton; Mr. E. Skjold; Mr. Evelyn Shaw; Mr. J. Alan Slater [A.]; Mr. John Slater [F.]; Mr. F. Danby Smith [A.]; Mr. L. Sylvester Sullivan [A.]; Mr. Augustus W. Tanner [A.]; Mr. Rudolph Tanner; Mr. Sydney J. Tatchell [F.]; Mr. Churton Taylor; Mr. W. Thomas, President National Federation of Building Trades' Employers; Mr. S. Douglas Topley [A.]; Mr. Percy B. Tubbs [F.], President of the Society of Architects; Mr. Raymond Unwin [F.]; Mr. Frederick Wallen [F.]; Mr. Edward P. Warren, F.S.A. [F.]; Dr. T. H. Warren, M.A., LL.D., President of Magdalen College, Oxford; Mr. Paul Waterhouse [F.]; Sir Aston Webb, K.C.V.O., C.B., R.A. [F.]; Mr. Maurice Webb, President of the Architectural Association; Mr. W. A. Webb [A.]; Mr. E. P. Wella, J.P.; The Mayor of Westminster; Mr. W. Henry White [F.]; Sir Frank Wills [F.]; Mr. J. B. Wills [A.]; Mr. Charles Woodward [A.]; Mr. Wm. Woodward [F.]; Mr. F. R. Yerbury, Secretary of the Architectural Association; Mr. Clyde Young [F.]; Mr. Ian MacAlister, Secretary, and other members of the staff, and representatives of the Press.

The usual loyal toasts, proposed by the President, were enthusiastically honoured.

THE RT. HON. JOSEPH PEASE, P.C., M.P., President of the Board of Education, in proposing "Architecture and the Sister Arts," said: "The history of art is associated with primitive man. We have knowledge that primitive men in the caves devoted themselves not only to oratory and music, but even to the carving of mammoths and bears on the sides of the caves, or on the bones which they had gnawed. But of all the arts I believe architecture must be the oldest, because the roofs of those caves were supported, and unless they were prevented from untimely collapse the residents might have disappeared, and the generations which followed, too. It is, of course, somewhat presumptuous on my part to try to apportion blame, praise, or criticism to any-

thing connected with art or artists when I am surrounded by so many men of genius, of skill in achievement, of taste in the various great arts of this country. But my excuse must be that I believe it is a great advantage to the nation, even if it is not absolutely essential, that everyone should endeavour, so far as his opportunities occur in life, to do something to cultivate artistic taste. Nearly every householder, in the course of his life, has to choose his own house, or to build one, and every such occasion presents an opportunity towards the improvement of taste, and making a man think in regard to the beauties connected with his own home and his surroundings. Taste creates, in turn, a demand for the application of art, first of all in the comforts connected with the home, which every individual desires shall be pleasing to himself; and secondly, in connection with the refining work of the national buildings of our country. I am greatly indebted to the President for the way in which he has helped the Board of Education in connection with its work at South Kensington, the Royal School of Art, and the Victoria and Albert Museum; therefore I feel that I am on common ground with you in proposing this toast. The work of training the young is a subject with which I am becoming daily more familiar; under the guidance of my officials I feel that I am getting to learn something in regard to the importance of following certain definite principles and establishing the training of the young on the right lines.—I have a great deal of sympathy with architects. I know the long years of study, the close application required, before an individual becomes fully qualified as an efficient architect. And I know the tact and patience architects have to show to their various clients, who expect all sorts of impossible things. They expect their money to go much farther than it possibly can; they place all sorts of limitations in regard to expenditure, and at the same time they keep on extending their demands on the architect, and he has to look pleasant and smile, and do the best he can. But all that process is not very helpful to his genius nor calculated to inspire him with artistic ideas.—I think we may rejoice in the fact that wherever there is progress in art, that progress, to at any rate a certain extent, remains permanent. Nations emulate one another, pursue one another, compete with one another in the glorious impulse towards the creation of that which is beautiful; and each age and each race imprints its own influence upon art; and art seems also to stamp each period in history, and to stamp each nation's characteristics.—I have expressed my sympathy with you, and I am now going to ask, and claim, your sympathy with me. I am responsible to Parliament for the Royal School of Art, and have to take a somewhat paternal and benevolent interest in the provincial art schools of the country. I have great problems before me, because all who are interested in art—whether in architecture, design, modelling, sculpture, or painting—realise that the system of art training has not reached perfection yet in this country; it is not an exact science. And it is very difficult for me, not being an expert, always to be sure that I am following exactly the right lines in endeavouring to secure the best administration for the training of the young in connection with the application of art to the industries. If there has been progress in this direction—and I believe that there has—although that progress may have been slow, it has been steady, and it is to a great extent due to the generosity of the various artists—painters, sculptors, and architects—who have

given their time and their labours, not merely to the production of works in which they themselves are mainly interested, but to the training and the teaching of the young, so that the genius of the nation might have fair and full scope in years to come. In our country we possess, perhaps, more beautiful homes than those possessed by any other country in the world. And not only are we proud of our rural homes and our beautiful old houses in the various sylvan resorts throughout the country districts, but I think that we may take some pride in the work of to-day, and you especially as British architects, in connection with the great buildings which we see surrounding us in this great City of London. And I think we may take good hope for the future. I believe the arts in this country will continue to flourish, and I will conclude by quoting the excellent words of your own motto: "*Usui Civium, Decori Urbium.*"

SIR THOMAS BROCK, K.C.B., R.A. [*Hon. A.*], in responding, said: Let me, on behalf of the profession of Sculpture, thank you most sincerely for the extremely cordial manner in which you have received this toast. The expression of your good will is especially gratifying, because the prosperity of sculpture has from the earliest of times been principally due to the association existing between the sculptor and the architect. Indeed, the two professions have always been so closely allied that one, that of sculpture, might almost be regarded as part of the other, one of the primary purposes of the sculptor being the adornment of architecture. I doubt if in the history of British sculpture the art has ever stood at so high a level as that at which it stands to-day, and I attribute much of the progress that has been made to the sympathetic attitude shown towards it by the leading members of the architectural profession. And our indebtedness is rather added to on this account, that as the result of this progress, considerable public interest has been aroused, evidence of which is to be found in every centre of industry and social life throughout the country. There is a certain section of the community—I suppose there always has been in every country and in every time—which professes to regard the Fine Arts—painting and sculpture in particular—as of no practical value, and as being therefore unnecessary to the welfare and the prosperity of a nation. I think everyone here will agree with me that such a view is both fallacious and short-sighted. Like that of learning, the fundamental purpose of all art must be to elevate and refine, and who will deny that, of such elevation and refinement, the issue must be the added well-being of mankind? Art no longer serves as the expression of a conqueror's pride; to-day it has a real social value. Equally with the spoken and written word, beauty of form and beauty of colour may assist in the forming of men's minds, and so be responsible in their refining influence for that clearer, wider, and truer outlook, upon which the advancement of civilisation must depend.

MR. BASIL CHAMPNEYS [*Royal Gold Medallist*], in responding for Architecture, said: The toast to which I have been asked to reply, Architecture and the Sister Arts, naturally suggests some consideration of the relations between them. It has been pretty constantly claimed on behalf of architecture, and not seldom conceded, that she takes precedence of sculpture and painting, a claim the grounds of which are fairly obvious. A primary and most important function of the sister arts has been, since the early days of civilisation, to adorn the building, especially the temple; for art has for the most part flourished in

connection with religion. On the well-known principle of "first catching your hare," the structure must take precedence of the decoration in order of time and of importance: the primary conception must be architectural; and, in controlling the consensus of the arts to a harmonious result, the architectural motive may justly claim to continue paramount—the original idea must be extended to the decorative accessories. I suppose we have all of us at some time or other pondered over a notion of the ideal building—one in which the architect, the sculptor, and the painter have worked in perfect harmony of thought to a common end—almost as though a single artistic soul had been divided between three bodies. There have, indeed, been in the past some few great humanists who could combine in themselves this triple function; but since their day the tendency has been towards specialisation and sub-division, and it is possible that in the future still further differentiation may be established. At any rate, at the present time, as our age does not seem likely to produce another Michelangelo or Leonardo—who possibly might be objects of suspicion to the general public if they did appear—the only condition on which some approach to the ideal may be attained is the sympathetic co-operation, in which the architect, as the originator of the *idée mère*, must almost inevitably take a leading and controlling part. All this seems fairly obvious, and will, I suppose, be generally admitted. There is, however, another point of view from which the relative positions seem likely to be reversed. It is impossible to maintain at the present moment, whatever has been held in the past, that architecture can have taken precedence in time, have come into existence before painting and sculpture. To make such a claim would be to fly in the face of archaeology and probably also to flout the anthropologist. The former shows us that an excellent graphic art portraying animal life, discovered in the South of France and elsewhere, was evolved at a time when men dwelt in caves, and when the architectural impulse could be exercised only in the choice and possible improvement of habitations made by nature. Probably no less proficiency was reached in sculpture by these same cave-dwellers, though the actual evidence in surviving examples is more difficult to obtain. But even in the absence of evidence we might assume that this art was not wholly neglected by them. The childhood of the world is somewhat similar to that of the individual. We can scarcely imagine that with the material ready to hand and probably superabundant leisure, these prehistoric ancestors of ours refrained from the pastime of making mud-pies; we cannot very well imagine that, having the keen instinct of portrayal shown in their scratchings on horn or bone, they stopped short of fashioning the mud into the semblance of human or animal form. Probably the paucity of record of their sculpture is due to want of skill in baking, and owing to this much that was worth preserving, possibly on more than archaeological grounds, has returned to the dust from which it was formed. So much we may learn from the archaeologist. The anthropologist may suggest to us a still earlier origin of the graphic arts. From him we might learn that the earliest painting, the germ of the pictorial art, is to be found in the application of pigment to the human form with a view to improve on Nature, a consideration which suggests that the original motive of clothing was not so much warmth or decency—the latter a point on which very divergent views seem to have prevailed—as decora-

tion. To this position, indeed, certain modern fashions seem to show a tendency to revert! The same authority might establish that the very earliest evidence of the sculptural idea is to be found in the endeavour to improve the human form by remodelling the living clay according to ideals with which it is not easy for us to sympathise, but which must nevertheless be classed as in essence sculptural. And all this took place possibly before even the desire for a habitation had suggested any approach to an architectural idea. So that I think we architects must concede that from at least one point of view our art must be content to take a back seat. However, on an occasion such as this, all questions of precedence, of comparative importance, of origin must give way as being of no more than academic interest. It is more to the purpose to express a confident hope that the three arts will work in constantly increasing harmony. I am proud to answer for the art in which I have spent a fairly strenuous lifetime.

MR. FRANK DICKSEE, R.A., responding for "Painting," said: In attempting to reply to a toast of this kind one is really amazed at the extent of the field before one; it is quite impossible to do adequate justice to it. At least I find it so. Mr. Pease touched on one point which is of interest to artists, and painters especially, at the present time—viz., a curious modern development in the art of painting, which I think most sane people very sincerely regret; I refer to those exhibitions which have been held of late in Bond Street and the neighbourhood, by post-impressionists, cubists, futurists, and all those cults of which I do not profess to understand very much. But I think it is bred of a spirit which perhaps the Minister of Education would do well to watch. I am inclined to think that it is due to that desire to obtain the wages of labour without labour. It is a little of that spirit which you hear of in another place of getting ninepence for fourpence! This, I am inclined to think, may account to a certain extent for these mysterious and weird, and I think diseased, productions. And perhaps it is this spirit of laziness on the part of the artist, or a perception that a feeling of notoriety is within his grasp, that allies itself with another baneful spirit which is to be found in a certain section of the public, a section that seems to get rather wearied of well-doing, and has a sort of sickly, jaded appetite which needs stimulating by highly spiced and unwholesome food. Therefore these misguided, and demented artists—for if they are sincere, I am sure they are insane—afford this food for those jaded appetites. That, I think, is perhaps a phase of modern art which those who are in a responsible position should watch with a certain amount of care. There is one other point I should like to mention, because it is so very seldom one is in a position to make a suggestion to a Cabinet Minister. I think it is recognised by most of us that, although we possess in this country an enormous number of beautiful and valuable pictures, they are fast crossing the ocean and finding a home in that country where wealth is amassed by a few persons who have such command of money that it is a matter of indifference to them whether they spend £5,000, £50,000, or £100,000 on a work of art. Although it is impossible to prevent art productions going where the source of wealth is found, I think we might take some means to obtain a little satisfaction for ourselves in the transaction. Therefore I suggest—and it is perhaps a rather bold suggestion—that there should be an Export Duty put upon all works of art of Old Masters leaving these shores. Not very long ago one of our noblemen parted

with a landscape by Rembrandt for £100,000. Consider if an Export Duty of ten per cent. were put upon that, and that this sum were set aside for the Trustees of the National Gallery! I do not think his lordship would have suffered very seriously in pocket (very likely he could have made the purchaser pay it), and the National Gallery would have had the handling of £10,000—a very useful addition to the £2,000 per annum which, I think, the Treasury allows them. The suggestion has perhaps been made before, but I hope that some day it may be considered.

MR. PAUL WATERHOUSE [F.], in proposing the toast of "The Lord Mayor, the Sheriffs, and the Corporation of the City of London," said: My Lord Mayor, it sometimes happens to a speaker on these occasions that the close of his speech is drowned in those symbols of inattention, chattering and the clatter of knives; therefore, before the end of my speech is lost, may I put the end at the beginning for safety's sake, and tell you that it is my task to ask this audience to drink most heartily your personal health, and the personal health of the Sheriffs, also to wish long life to you and to your great office? Mr. President, you will probably allow me to remind you that there were days when you were a much more serious young man than you are at present. I allude to the days of your youth in years; when there was probably put into your hands, as into mine, a book which I believe the degenerate youngsters of to-day have nothing to do with, probably the most ancient illustrated volume in the world, a work of imagination, called Euclid. Euclid sets himself, as you and I know, Sir, to prove things. Some of the things he proves are hard of belief, even with his explanations. Some of the things he proves are so obvious that we can do without Mr. Euclid's explanation, and I have a proposition before me to-night of that kind. No argument is needed from me to induce the present audience to drink to this toast. Obviously there was good reason for entrusting me with it. It is not merely a self-evident proposition—it is one of those axioms or postulates which Euclid gives away on the first four pages, "Two straight lines cannot enclose a space." Two hundred architects cannot withhold their homage to the Lord Mayor. I have assumed that no words of mine are needed in recommendation of the toast, but it is possible you, my Lord, may require a few words of explanation as to why the homage of architects should be acceptable to yourself. We are lovers—fully licensed lovers—of antiquity, of things which are old, and, being old, are also beautiful and useful. There is no doubt about the beauty and usefulness of your office. As to its age, gentlemen, have you realised that it is 725 years old to-day? Have you ever thought of it? 725 years! How much older the mayoralty of London is than almost anything else in London or in England—older than Magna Charta! Think of that, you reformers! Older far than Crecy and Agincourt! Think of that, you warriors! Older than the House of Commons! Think of that, you Members of Parliament! The origin of the House of Lords, gentlemen, is wrapped in mist. Happily the date of the mist is known. (Laughter.) It settled on England some time after the Lord Mayor had been several years in possession of his office. I see here my friend—if I may venture to call him so—the President of Magdalen. I wish I could assure him that his ancient Oxford college was as old as the office of the Lord Mayor, but I cannot. In fact, as far as I can make out, the Lord Mayor advances towards us out of the halo of mythology, arm-in-arm with

the Tower of London and the Worshipful Company of Weavers. (Laughter.) Architecturally speaking, my Lord, you are not of a period that finds special favour by way of imitation at the present time. You are just casting off such things as zig-zags and chevrons, and are about to deck yourself with dog-tooth. You are delighting the heart of the late George Edmund Street by adhering to the square abacus. You are "transitional," in fact. It is a fine thing to be; to have about you the flavour of a glorious past, the hope of a fine future, and the blessed element of change. But, Sir, we give thanks to heaven that though you may be a little ivy-clad, so to speak, you are not a ruin; nor again, thank heaven, an historic monument. My Lord, will you forgive me if for a minute I am a little intimate, and assure you in a privacy to which these gentlemen need not listen—that there is a kind of personal reason why I should be allowed to propose your health to-night? Once upon a time, in a murky northern clime, where the waters of the Medlock seek the sea—this seems to have dropped into rhythm and rhyme, so I must try to keep it up—Where the waters of the Medlock seek the sea, on a chilly autumn morn, two October babes were born. And one, my Lord, was you, the other me. (Laughter.) Poetry runs away with people, and it has run away with me. The place and the month were the same, my Lord, but not the day nor the year. The excellent idea of being born in Manchester which came to you, came to me a year sooner—(laughter)—and was acted upon. (Laughter.) It is quite possible, my Lord, that you and I may have met in our walks abroad. It was wrong of me not to see the emblems which hovered over your infancy, but you could never have guessed that that other child would one day rise up to speak to you in public. A super-man of super-vision could have seen above your cradle the golden glow of the regalia of the City of London. Over your humble servant, as emblems of a humbler future, were a blunt pair of german-silver dividers. Did I call myself "your humble servant"? It is one of the regrets of a career with many disappointments in it that I can only wish so to style myself. The place which I call my office, my Lord, is separated from your dominions by seven inches, the beggarly half of a fourteen-inch wall. In the entrancing view from the windows are the two grim granite stones which mark the westward boundary of your Empire. There are times when you are visited by monarchs from a distance, from larger though less important kingdoms. You go forth to meet them on that spot with your sword. After a moment of menace you change to graciousness and beat your sword, not into a plough-share, but—let us say—into a table-spoon, and turn hostility into hospitality. If, my Lord, on one of those occasions you should think fit, instead of retiring so gracefully to the City, to make a border foray amongst the neighbouring tribes of the western boundary with the idea of extending your realm and would care to knock at my office door, which is next adjoining, it is possible that I and my men would come down to you like the six citizens of Calais, in our shirts—yes, we should certainly wear our shirts—as bloodless first-fruits of your westward conquest. It would be an impertinence in me to speak of your personal services during your year of office. All that you do in the way of conspicuous ceremonial is well known to all of us through the public prints. Many unchronicled things which you do in the way of faithful drudgery are by many of us guessed at, and for all these we thank you

most heartily. Only two matters would I venture specifically to allude to. One is the hospitality which you have extended to the London Society, in which many of us are deeply interested, and the other is the confident hope and belief and faith that we architects all have, that nothing can go very far wrong with St. Paul's whilst there is such a corporation to look after it. We feel grateful for what has already been done by your Corporation in that matter. And now, my Lord, you may be sure, as I say, that it is in no misappreciation of your personal services and personal prestige that when I call upon my colleagues here to drink to this toast I ask them to remember the 725 years that are behind you, and to remember also the future, and to hope for—let us be modest—at least another 275 years, to round off the millennium. I have no use for the Englishman who has no use for England's history. The past is a most precious possession. Some folk say: "Look forward, do not look back." Some people think of the present as a mere spring-board for the future; but a happy past is a great possession, and I think you will agree with me, my Lord, that the present, which you are so ably making, is really the human opportunity for providing posterity with an unblemished and beautiful past.

THE RIGHT HON. THE LORD MAYOR: First of all let me say how gratified I am that Mr. Waterhouse, whose name is so well known and so revered in my native city, has favoured me by proposing the toast of the Lord Mayor and Corporation of the City of London. Mr. Waterhouse, in his very witty and able speech, referred to the antiquity of our great Corporation. But, ancient as we are, we are proud enough and conceited enough to feel that although the most ancient Corporation in England, and possibly in the world, still we are the most up-to-date Corporation in existence. We are so up-to-date that we feel it necessary from time to time to consult, Mr. President, with your able Institute to assist us whenever we are about to alter or beautify our grand old city. On many occasions we have had advice, and very good advice, as we know we shall always get, from your very excellent institution, and I believe at the present moment we are seeking your assistance in connection with the new bridge which is about to be built across the Thames. Of course it is a very great pleasure on all occasions for the Lord Mayor to have the toast of his health pledged, because he feels that it is a compliment not to the actual holder of the office but to the office itself, and in particular to the Corporation, in which every citizen of London is interested. I am delighted to be present this evening, because I know the good work that your Institute is doing, and I know, as Mr. Waterhouse kindly mentioned, the association between the Royal Institute of British Architects and the London Society, to which I was able to offer some slight hospitality a short time ago. As long as those two bodies work amicably together, with the one idea in their mind of stopping the vandalism which would get rid of our fine old monuments, we shall have cause to thank them. I think so long as the Corporation of the City of London exists and keeps its head, and has the assistance of the Royal Institute of British Architects, there will be no fear of vandalism in the City of London. We have appreciated that year by year in the City; and not only in the City in particular, but in Greater London, we are indebted to members of your institution for the magnificent buildings that are now being put up. So long as your institution keeps a watchful eye upon that, and

gives the advice which it is always ready to give, I do not think we need fear that our country will be outdone by any other country in the magnificence and beauty of its buildings. I often say it is not much good being Lord Mayor of London unless one can take some liberties. And I shall take a liberty now. I can only conclude it is through the extreme modesty of your President that the toast of his health is not down on this list. So I shall take the liberty of proposing it, and it gives me very great pleasure to do so. As far as architecture is concerned, the name of your President is a household word. He has attained the highest distinction the profession can offer—that of being your President. He is distinguished, too, not only by his architectural works, but also by his writings upon your art. It is therefore a great privilege to me to have the opportunity of proposing the toast of his health, and gratifying because I know everyone will support me to the fullest degree.

The toast was drunk with musical honours.

THE PRESIDENT: My Lord Mayor, my lords and gentlemen, I thank you, Sir, for the very kind way in which you have proposed this toast. I have often wondered what it must be for the Lord Mayor to have to propose the health of some person whom he had never met before. You, Sir, are not in the least daunted by the fact that we have not met before to-night, though we have had some delightful conversation. But the Lord Mayor went through his work like a man—a testimony, I think, to the high ability of those who hold the great office of Lord Mayor of London. Of course, we all know the traditional hospitality of the Mansion House; they extend a kindly hospitality to everybody—good, bad, and indifferent—and I believe I come in somewhere. (Laughter.) There was one point in that extremely able and amusing speech of my friend Mr. Paul Waterhouse—one of the best speeches I have ever heard him deliver—on which I shall venture to correct him, because last year I had the honour to propose this toast. I think I am right in saying that the Corporation of London made a shot, a magnificent shot, in the year that he named, but that shot missed its mark, and they finally established themselves at about the time of Magna Charta. I only mention this because Mr. Waterhouse suggested that when the Mayor and Corporation established themselves they were in a transitional stage. I controvert that altogether; they were not in a transitional stage—they were in the early part of the thirteenth century, by which time, speaking as an architect, the great stream of English architecture was fully started and under way. Therefore when the Mayor and Corporation were firmly established they were fully in the swim and current of English life. That position they have maintained magnificently ever since; and I do not think there is any likelihood of their passing into a transitional stage. I think the work which they do so ably now will advance to further stages, and that it will not be diminished in the future. I thank you again very sincerely, gentlemen, for the kind way in which you have received this toast. I ask the indulgence of the distinguished visitors who are here to-night if I say one or two words on a more intimate matter—namely, the private affairs of the Institute. I am sure they will accord me that indulgence, because it is a matter of somewhat burning interest to us at this moment. About two years ago, or rather more than that, the whole question of registration was referred back to your Council, with an intimation that it was desirable that they should go into

the whole matter, to see what they could do. They appointed a very representative committee to investigate the question, and the committee was presided over with indomitable persistence by our old friend Mr. John Slater, and he was helped by other good men of the Institute. They conducted a careful investigation into the whole situation, and found two incontestable facts. One was that the majority of those who practise architecture in this country had made up their minds that they must have registration, in some form or another. They also found that the chances of any Bill of the slightest value in this matter being placed on the Statute Book was, to all intents and purposes, negligible. They endeavoured to see what they could do to help matters, and in the result they have produced a scheme and policy of Registration by Charter, which, I am glad to say, in its essential principles, has received the approval of the Royal Institute of British Architects. There are still certain details in the machinery to be settled. It is not to be expected that a large movement of this sort will be accepted without serious criticism. My own feeling is that where criticism is *bona fide*, where it is constructive and not destructive, the more criticism we have the better, because, human nature being what it is, it is quite impossible to satisfy everybody. My own view is that if a scheme is produced to which nobody objects, the probability is that it is not worth objecting to; because all the vital elements, all the elements of progress and development in that scheme, have been eliminated in order to spare the susceptibilities of somebody or other. Now, gentlemen, I do not think the policy of the Council, which has been endorsed by you, is under that reproach. It has had a great deal of criticism, some of it extremely good; and it has evolved a scheme which, I believe, will be to the permanent interests not only of this Institute, but—what is of more importance—of the whole profession of architecture in this country and its relations to the public. In propounding this scheme, your Council took its stand on the undoubted fact that this Institute is the one body in the country which is capable of dealing with a problem of this magnitude. The past history of our Charters, the many distinguished men in the last fifty or sixty years amongst our members, the services which the Institute has rendered to the public—and I am glad to have the endorsement of the Lord Mayor in this matter—show that the Institute is justified in taking up this position. I believe this measure is a wise, logical, and statesmanlike measure. I believe, also, that if it is loyally supported, and if it is administered in a generous and ungrudging spirit, it will solve the problem that has sapped the energies of our great profession for the last quarter of a century. Gentlemen, it is something over two years since I had the honour of being elected President of this Institute; they have been years of considerable anxiety and difficulty. As I shall shortly be handing over my charge, I hope you will not find that I have failed in my trust. If I have, it is my own fault, because I have been most loyally supported by all the members of this Institute; and when I came into office, over two years ago, I came into touch with a Council which was new and untried, and I say deliberately, with full knowledge of the past history of the Institute, that I believe no President of our Institute has ever had a more loyal and devoted Council than that which I have had the pleasure of working with during the last two years. I shall never forget, gentlemen, my association with all of you who have

laboured in the service of this Institute. My successor in this office will be Mr. Ernest Newton. (Applause.) He, unfortunately, is unable to be present to-night, having an older engagement to examine in architecture at the University of Liverpool. But I need not say anything to commend to you my successor, because we know him as an accomplished architect, a man of great personal charm, and a man who has never spared himself in the service of the Institute, on the Council, or on the Board of Education. I am sure the new Council will give him loyal support in his arduous and responsible duties, such as has been extended to me during the past two years, and I wish the best of luck to the new President and the new Council.

MR. WALTER CAVE [F.]: The toast of the guests of this evening has been entrusted to me at somewhat short notice, so I trust our guests will forgive me if my remarks about their various attainments are brief. We have had the pleasure of the company of the Lord Mayor and Sheriffs this evening, and the remarks by Mr. Waterhouse concerning them have been so apt and well expressed that no additional words of mine can be of any use. Mr. Pease, whom we have had the pleasure of hearing to-night, has also been intimately connected with us in the matter of examinations in architecture; particularly the President has been in communication with him, and he has given, I believe, help and advice on these matters. As an educating body there is nothing more gratifying to us than the connection with an official in his position. We also have with us various members of the Royal Academy, whose names are familiar to us all; there is Mr. David Murray, Mr. Frank Dicksee, Mr. MacKinnal, Sir Thomas Brock—whom we have heard—Sir James Linton, Sir William Richmond, Mr. Anning Bell, Sir George Frampton—all of them welcome amongst architects. We have also Mr. Lamb, the new secretary of the Royal Academy, whom we welcome here to-night. We have various presidents of learned societies; and we have Mr. Walter Lawrence, President of the London Master Builders' Association, and Mr. Rice, President of the Institute of Builders. These we also welcome, and wish them the very best of luck in dealing with the difficult position which is before them at the present time. We have also Sir Rickman Godlee, President of the Royal College of Surgeons, and Sir Thomas Barlow, President of the College of Physicians, both of whom we welcome at this board. The City Companies are represented by the Carpenters', who have always been very much in sympathy with our work, the Salters' Company, the Drapers' and the Clothworkers'. There is one other gentleman here to-night whose presence we have often earnestly desired and asked for, but up till now, I believe, he has not been able to attend; I speak of Mr. Thomas Hardy. His reputation as a great novelist is well known, but it may not be so well known that he was articled once to a distinguished member of our profession, an uncle of our President, Sir Arthur Blomfield. I do not know the date when he was there, but I think it was some years ago. (Laughter.) Professor Gerald Moira we welcome here to-night; he is the designer of the excellent cover of our menu. I come last to the Dean of St. Paul's. I am in the proud position of being able to claim that I was at school with him, though in wandering about in the lower forms of Eton I used to see him in the dizzy heights of the sixth form. His reputation as a scholar began at Eton, where he won the Newcastle Scholarship and other prizes. He is now occupying a position in London of immense interest and importance, and his say-

ings are well known. I have great pleasure, gentlemen, in proposing the health of our guests; there are others whom I should have mentioned had time permitted, but I couple with the toast the name of the Dean of St. Paul's.

THE VERY REV. WILLIAM RALPH INGE, D.D., Dean of St. Paul's: I have been wondering why the honour of replying to this toast has been conferred upon me in the presence of so many distinguished guests, some of them resplendent in medals, stars, and gold chains; and I can only suppose I have been chosen as, in a sense, representing the most conspicuous building in London; that I may shelter my modesty under the shadow of Sir Christopher Wren's dome, which is now, I am happy to say, in the charge of two distinguished members of your body. Or perhaps our hosts have been moved by admiration not of ecclesiastical, but of theological architecture, by those wonderful controversial edifices, reared in a style which no base materialistic architect ever dares to emulate, a style in which, for the most part, the foundations are ingeniously supported by the superstructure. However that may be, it is, or should be, an easy task to express my thanks, on behalf of my fellow-guests and myself, for the delightful evening which we have spent. We all feel it a great honour to be entertained by this body, the Royal Institute of British Architects, men who have done so much to transform our rather sombre Metropolis into one of the finest cities in the world. I often think that the architect, more than a member of any other profession, must feel that in his case the voice of conscience is objectified in an embarrassing manner. Men in other professions may forget their mistakes, or deny them, or, in some cases, bury them; but the architect is always obliged to live with his misdeeds staring him in the face, unless he can silence the Recording Angel by making friends with the Suffragettes—and that is a theory of the recent outrages which it has been reserved to me to suggest. But how seldom it is in the case of any important new building that we are not able to feel that it is an ornament to the place which it occupies! Indeed, we owe a very great debt to our architects. But I must, before I sit down, specially thank my old school-fellow, Mr. Cave, for the very kind way in which he referred to myself. It is, indeed, one of the great pleasures of these public dinners to me that I so often meet old Etonians whom I have not seen for thirty-five or forty years. I will not say I always remember them; sometimes, when some portly City magnate comes up and claims acquaintance, I feel inclined to say, when I survey his ample waistcoat—(laughter)—“I am very sorry, but this is not *orbis veteribus notus*, the globe as known to the ancients; it is more like Mercator's projection!” (Laughter.) Gentlemen, I beg to thank you very heartily, in my own name and in those of my fellow-guests, for the most enjoyable evening that we have spent. (Applause.)

During the evening a programme of music was excellently rendered by the following artistes: Miss Amy Simpson, Miss Helen Blain, Mr. Frank Webster, and Mr. William Emerson.

The New Architect Knight.

At the distribution of His Majesty's Birthday Honours announced last Monday a knighthood was conferred upon Mr. John James Burnet, R.S.A., LL.D. [F.]. At the General Meeting on Monday the President, Mr. Reginald Blomfield, R.A., took advantage of Sir John Burnet's presence to tender him the congratulations of the Institute on his well-merited honour.

St. Paul's Bridge.

Sir William Emerson [F.], who was appointed by the Corporation to assess the merits of the competitive designs sent in for the architectural treatment of the new St. Paul's Bridge, has awarded the first premium of £300 to Mr. G. Washington Browne, R.S.A., Edinburgh; the second, of £200, to Mr. Charles E. Barry [A.], of Parliament Mansions, Westminster; and the third, of £100, to Mr. E. R. D. Selway [Licentiate], of 9A, Fontenoy Road, Bedford Hill.

The Proposed Architectural Defence Union.

The Special General Meeting called for Monday, 15th June, to consider the scheme prepared by the Board of Professional Defence for the formation of an Architectural Defence Union, fell through owing to the small attendance of members. By-law 65 provides for a quorum of not less than thirty subscribing members, of whom at least sixteen must be Fellows; but by half-past eight only eleven Fellows (including six members of the Council), thirteen Associates (including one member of the Council), and one Licentiate had assembled, and the Chairman (Mr. George Hubbard, F.S.A., *Vice-President*) had no alternative but to declare the meeting void. An informal discussion, however, took place, and regret was expressed at the indifference, judging by the scant attendance, with which this important proposal seemed to be regarded by the general body of members. On the motion of Mr. Hubbard, a very cordial vote of thanks was passed to Messrs. Max Clarke [F.] and K. Gammell [A.], respectively Chairman and Hon. Secretary of the Committee responsible for the scheme, for the immense amount of time and trouble they had devoted to the matter.

For the information of members it may be mentioned that the scheme which was to have been discussed on the 15th was the outcome of the Resolution passed at a fully attended meeting of the Institute held on the 9th June 1913, when on the motion of Mr. Edmund Wimperis [F.], seconded by Mr. K. Gammell [A.], the following resolution was unanimously adopted—viz., “That the Board of Professional Defence be instructed forthwith to prepare a detailed scheme for the creation of a Fund for Mutual Aid and Advice (Legal) for members of the Institute as necessity may arise.”

The Board of Professional Defence in reporting to the Council the result of their labours pointed out that their scheme was practically based upon the Articles of Association of the Medical Defence Union, which had been in existence for nearly thirty years and had proved of the greatest benefit and assistance to the medical profession, of whom by far the greater number were members of the Defence Union. The Board further pointed out that in preparing their scheme they had had the advantage of the advice of Dr. George Bateman, General Secretary of the Medical Defence Union, who had most kindly attended one of the Board's meetings and placed his experience freely and fully at their service.

University of London School of Architecture.

A conversazione given last Wednesday by the Vice-Chancellor and governing body of the University of London was the occasion of a large and brilliant gathering in the handsome new buildings of the School of Architecture at University College, Gower Street. Prince Arthur of Connaught, President of the University College Equipment and Endowment Fund, was present at the function, and amongst those presented to His Royal Highness were the generous donor of the new buildings (whose name, by his desire, has not yet been made public), and Professor F. M. Simpson [*F.*], architect of the buildings and Director of the School of Architecture. The building provides accommodation for over 100 students, and includes three large studios (50 feet square; 35 feet by 22 feet; 27 feet by 29 feet); a museum (50 feet square); a cast gallery (48 feet by 28 feet); a library (35 feet by 22 feet); a lecture theatre (40 feet by 28 feet); a class-room (27 feet by 19 feet); an entrance hall (27 feet by 10 feet). A feature of the entrance is the eighteenth-century doorway and architrave transferred from the King's College School of Architecture at the instance of the delegacy of that College. There are also private rooms for professors and lecturers, a diagram-room, dark-room, cloak-rooms, lavatories, and additional rooms for new developments which can be utilised as required.

On the occasion of the conversazione, among the large collection of interesting exhibits were a selection of diagrams from the collection formed by the late Professor T. L. Donaldson to illustrate his lectures at University College, 1841-65, and the diagrams used by the late Sir Gilbert Scott to illustrate his lectures on Mediaeval Architecture at the Royal Academy. On view in the Library was a valuable collection of rare architectural books, plates, and engravings, the property of the School. For the entertainment of the guests a charming selection of music was performed, and lecture-demonstrations, with lantern slides, were given, among others, by Professor Adshead [*F.*], on "Some Absurdities in Town Planning"; by Mr. A. E. Richardson [*F.*], on "Some Aspects of Professor Cockerell's Work"; by Mr. J. A. Gotch, F.S.A. [*F.*], on "Our Countryside"; and by Professor F. M. Simpson [*F.*], on "Châteaux in the Loire Valley."

The Department of Architecture at University College has grown out of a Department entitled "Engineering, and the Application of Mechanical Philosophy to the Arts," instituted at the foundation of the College in 1826. The Department of Architecture was started in 1841, and the first Professor was Thomas L. Donaldson, who held the Chair for nearly twenty-five years. He was succeeded by Professor Hayter Lewis (1865-81), who had a considerable share in establishing and organising the R.I.B.A. Examinations in Architecture. His successor was Professor T. Roger Smith (1881-1903), during whose time the Carpenters' Company established at the College two evening classes, one for Architectural Drawing and

the other for the teaching of Building Construction, and later a class for measuring and estimating builders' work. Professor Roger Smith was succeeded in 1903 by the present Director, Professor F. M. Simpson. Under his direction the school has been re-organised: complete Day Courses have been instituted, one leading to the Architecture Certificate, the other to the B.A. Degree. Courses in Academic Design have also been instituted.

At King's College a chair with the title of "Art Construction" was established in 1840, and was held by Professor William Hoskin till 1861. He was succeeded by Professor Kerr (1861-1890), during whose tenure the title of the Chair was changed to that of "Architecture and Building Construction." Professor Kerr was succeeded by Professor Banister Fletcher (1890-1899), who instituted full-time day courses extending over three years. Professor R. Elsey Smith was the next occupant of the Chair, his appointment dating from 1899. After the incorporation of University and King's Colleges in the University of London, the Senate decided that it would be expedient to combine the two Schools of Architecture in a single building, for which a suitable site was available on the north-west front of University College. The generous gift above referred to enabled the combination to take effect, and work was begun in the new building on the 1st December 1913. Professor F. M. Simpson is assisted by Professor R. Elsey Smith, Mr. Leslie Wilkinson [*A.*], and Mr. Arthur Stratton, F.S.A. [*F.*], Lecturer. Sir John Burnet, R.S.A., LL.D. [*F.*], is the Special Visitor for the Academic Design Class, and Mr. Leonard Stokes [*F.*] and Mr. Edward P. Warren, F.S.A. [*F.*], Special Visitors for the Evening Design Class.

London University Site.

At the meeting of the Senate of the University held on the 17th inst. a letter was read from the Premier to the Chancellor of the University (Lord Rosebery) stating that the Government could not contemplate the diversion of Somerset House from its present purposes. The Senate at the same meeting passed the following resolution:—"That the Vice-Chancellor be requested to inform his Majesty's Government that the Senate, having considered various sites which have been suggested for the headquarters of the University, are of opinion that it is undesirable to proceed further with such consideration unless and until H.M. Treasury intimate their willingness to provide accommodation more suitable in situation, more convenient in character, and on terms not less advantageous as regards tenure, etc., than those attaching to the present occupation at South Kensington."

Victoria and Albert Museum.

The Board of Education announce that on and after Wednesday, 1st July, 1914, admission to the Victoria and Albert Museum will be free every day.

International Garden Cities and Town Planning Association : Congress and Tour.

The first congress and tour of the International Garden Cities and Town Planning Association to be held in England and Scotland during July promises to be very successful. There are parties from Canada, America, Australia, and India, while Continental countries will be represented by Austria, France, Germany, Holland, Hungary, Italy, Poland, Russia, and Spain. The party is visiting the principal housing and town planning work of the country, and is holding short conferences in the various towns in order to consider the problem in each place. There are several official Government representatives and a large number of representatives of municipal authorities desirous of learning at first hand of the housing work which has made England famous throughout the world. Those wishing to meet and exchange views with the experts of other countries can obtain particulars of the honorary secretary, Mr. Ewart G. Culpin, 3, Gray's Inn Place, Gray's Inn, W.C.

Architects' Benevolent Society.

A friend of the Architects' Benevolent Society who desires to remain anonymous, and who has for many years been interested in its work, has just presented the Society with a donation of £1,000.

CORRESPONDENCE.

Registration by Charter.

65, Harlesden Gardens, N.W. : 20th June 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Whatever may be said in advocacy of the Registration proposals now before the Institute, it is useless disguising the fact that they are not favourably regarded by the profession as a whole. Apart from the Licentiates' grievance, arising out of their exclusion from the class of "Chartered Architects," there is the opposition of the Society of Architects to be reckoned with, which, combined with that of a vast number of unattached practising architects, is certain to place the Institute in a most embarrassing predicament if the present policy is continued without radical amendment.

The unhappy distinction between "chartered" and "registered" architects is an extremely objectionable element of the new proposals, and in my judgment is alone sufficient to wreck the ultimate success of the scheme.

The title "registered architect" is sure to be regarded as denoting inferiority of rank (signifying, as it must, the unqualified status), and it is inconceivable that unattached architects with a reputation to maintain will voluntarily submit to the designation.

If the policy of Registration by Charter is to be brought to a successful issue, it is surely obvious that the Institute must have the support of the entire profession.

I would suggest, as materially contributing to this end, that the title "chartered architect" be applied to all architects eligible for admission to the Register, irrespective of academic status; the qualification for admission after the termination of the proposed registering period being by special registration examination conducted by the Board of Registration (from which Associates R.I.B.A. would be exempt).

Secondly, that the Registration Board in control of the Register be triennially elected from the four classes of Fellows, Associates, Licentiates, and non-members of the Royal Institute, in strict proportion to their numerical strength on the Register.

Thirdly, that the registration machinery brought into existence in the first instance by Royal Charter be incorporated in a Registration Bill for enforcement by Statute as soon as opportunity occurs.

If the new charter is framed in accordance with these proposals, I venture to affirm that the Institute policy will commend itself to the vast majority of architectural practitioners throughout the country.

Yours truly,

C. D. HAWLEY [A.]

Registration and the Position of Licentiates.

3 Queen Street, Cheapside, E.C. : 24th June 1914.

SIR,—Will you allow me to add a word to my protest of the 4th inst. in the nature of an appeal to the whole body of corporate members to consider the questions now before the Institute in a spirit of devotion to the future interest of the profession as a whole. May I ask any member who desires to differentiate on the Register, to ask himself seriously the simple question, "Why do I desire differentiation?" And if the answer is a selfish one, may I go further and ask him to change his attitude? Personally, I cannot imagine any motive for wishing to differentiate which is not a selfish one.

Registration may be a good thing or a bad thing, but good or bad the Institute is committed to a certain policy, and it is for those who hold the position of the Institute to be of value to the profession, and for those who are the temporary custodians of its prestige, to see that nothing is done to-day which a future generation may regret. Surely there are some amongst the leaders of the Associates who can speak with sufficient authority, and with such weight of argument, that the whole body of Associates may believe that it is better to think of the profession than of the individual self. To preach the gospel of unselfishness may be a thankless task, but it is better than kicking against the pricks; and it appears to me so clear that the selfish policy must fail that I marvel that an apostle is needed to preach the gospel at all. I would like to put the following points to those Associates who so ardently desire distinction.

1. Associates will not be in any way affected by being on the same Register as those who are not members of the Institute.

2. Competition will be neither more nor less after

Registration than before, as far as the present generation is concerned.

3. Registration will not give any more than admission to the Institute has given to Licentiates—i.e., recognition of qualification to practise.

4. The Institute, by recognising the qualification to practise when admitting Licentiates, did all that is necessary for inclusion on the Register; and by seeking to distinguish between those entitled to practise (the only *raison d'être* of a Register) and its corporate members, the Institute becomes in the eyes of the public just a little ridiculous.

5. There is no reason why the Privy Council, or the public, should suppose that the 852 Fellows and 1,695 Associates R.I.B.A. are each and all worthy to be set above some 7,000 other practising architects.

Since my letter of 4th June was published in the JOURNAL I have received several calls on the telephone letters, and visits from other Licentiates in London and the Provinces, and I can assure the corporate members of the Institute that rather than put up with the treatment which some at least seem to think we merit, the whole body of Licentiates will be appealed to, and I have little doubt they will take the necessary steps to protect themselves from any action on the part of the Institute; for I do not suppose any member of the R.I.B.A. can imagine that the Charter would be granted in face of the active opposition of 2,000 of their own newly-elected members—elected for the very purpose of obtaining Registration by Charter. Let me make myself perfectly clear on this point, I am not writing this as a threat, but as a warning. I am speaking only for myself and without other authority, merely as one who has the ultimate interest of a great profession at heart, and with no personal interests to serve. I have existed 45 years without the Institute, and suppose I could still exist without it. On the other hand, I like to think that the Institute represents all that is great and worthy in the profession. I have always taken an interest in its doings, even as an outsider; and it hurts me to think that it may not be all that it might be.

I would like to see the A.A., the Society of Architects, and other Societies drawn together under the ægis of the R.I.B.A., forming by affiliation one great association which would embrace everyone in the profession and protect every member; teaching our students, helping and guiding those in practice, and caring for those too old to work. In such a Society would it matter very much if some of us were not quite the equals of some others, either in ability, social standing, education, or culture? I think not. But even if it matters, the fact must be faced that the closing of an open profession must inevitably lead to inequalities for a time. Let us imagine the future of architecture in England under the conditions I plead for. The Royal Institute of British Architects with its schools and lecture rooms, library, discussion rooms, and general information bureau, official arbitrators and expert advisers; its defence

union, and its approved society; the unfailing guide, philosopher and friend of every architect in the country; all bound together in one great co-operative movement, "each for all and all for each."

I can see in my mind's eye such a professional ideal realised, but it will not be in my time. It is for us of this generation to do what we can to advance our ideals if only a little way, or at least to do nothing which may put off still longer the day of their realisation.

I venture to appeal to those who have the power in their hands, whose words carry weight, and who may mould the destinies of our profession, to think well before they do anything which being done cannot be undone, or say anything which being said cannot be unsaid, lest a future generation forget their distinctions in the bitter memory of their selfish action in the day when men were wanted to do the work of men at the Royal Institute of British Architects.—Yours, etc.,

JOHN E. YERBURY, *Licentiate*.

Sunlight and the Colours of Stained Glass.

12 Buckingham Street, W.C.: 18th June 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—It is, I believe, a well-established fact that strong sunlight streaming through certain old cathedral windows of richly tinted stained glass and impinging on stone pavement appears quite white, shewing no trace of the glass colours.

It has been suggested that this curious "depolarising" effect is peculiar to ancient pigments, the secret of which is lost; and even forms a criterion of the antiquity of stained glass.

As the phenomenon is not without its importance in the study of daylight, any information with regard to it or any observations made by members during their summer holidays would be welcomed by,—Yours faithfully,

PERCY J. WALDRAM, *Licentiate*.

MINUTES. XVI.

At the Sixteenth General Meeting (Ordinary) of the Session 1913-14, held Monday, 22nd June 1914, at 8.30 p.m.—Present: Mr. Reginald Blomfield, R.A., in the Chair; 26 Fellows (including 13 members of the Council), 24 Associates (including 1 member of the Council), 3 Licentiates, 2 Hon. Associates, and several visitors—the Minutes of the Meeting held 8th June 1914, having been published in the JOURNAL, were taken as read and signed as correct.

The Secretary announced that Mr. Ernest Godfrey Page had been reinstated as an Associate of the Royal Academy.

The President delivered an Address on the Presentation of the Royal Gold Medal to M. Jean Louis Pascal, and handed the medal to the Secretary to the French Embassy, M. Charles Roux, who had been deputed by the French Ambassador to receive it on M. Pascal's behalf.

M. Roux having read an Address sent by M. Pascal in acknowledgment of the honour, on the motion of Sir John Burnet, LL.D., R.S.A. [F.], seconded by Mr. Ernest Newton, A.R.A. [F.], a vote of thanks to the French Embassy and to M. Roux was passed by acclamation.

The proceedings then closed at 9.30.

THE EXAMINATIONS.

The Final: Alternative Problems in Designs.

In accordance with the Regulations the following six further problems in Design have been set by the Board of Architectural Education for students preparing for the Final Examination:—

Instructions to Candidates.

1. The drawings, which should be on uniform sheets of paper of not less than Imperial size, must be sent to the Secretary of the Board of Architectural Education, Royal Institute of British Architects, 9 Conduit Street, W., on or before the dates specified below.

2. Each set of drawings must be signed by the author, AND HIS FULL NAME AND ADDRESS, and the name of the school, if any, in which the drawings have been prepared, must be attached thereto.

3. All designs, whether done in a school or not, must be accompanied by a declaration from the Student that the design is his own work and that the drawings have been wholly executed by him. In the preparation of the design the Student may profit by advice.

4. Drawings for subjects (a) are to have the shadows projected at any angle of 45° in line, monochrome, or colour. Drawings in subjects (b) are to be finished as working drawings. Lettering on all drawings must be in a clear scholarly character.

Subject XVI.

(a) An island on a river, about 240 feet by 100 feet, is the site for an Hotel and Tea Gardens. The usual accommodation for a country hotel, together with ample balconies, having suitable outlook, is to be provided. There should be accommodation for housing boats. The general level of the island is 8 feet above the river, which in flood rises 6 feet.

Drawings required.—Block plan to $\frac{1}{16}$ -inch scale, with other drawings to $\frac{1}{8}$ -inch scale.

(b) A Dairy and Farmstead (60 cows).

Drawings required.—Plans to $\frac{1}{16}$ -inch scale.

Elevations of portions and sections to $\frac{1}{8}$ -inch scale, with $\frac{1}{2}$ -inch scale details.

Subject XVII.

(a) A Circular Hall for meetings, concerts, etc., to seat 2,000. An organ, and the usual cloak rooms and retiring rooms, must be provided. The building to be considered as being on a detached site, and the façades to be in stone.

Drawings required.— $\frac{1}{8}$ -inch scale and a detail to $\frac{1}{4}$ -inch scale.

(b) An Elementary Mixed School for 200 children, for a Rural District. The area of the site not limited, but the school is to be designed on the Corridor System. A Manual Instruction Room and a Cookery School are to be included.

Drawings required.—Block plan to $\frac{1}{32}$ -inch scale. Other drawings to $\frac{1}{8}$ -inch scale, and detail through Hall to $\frac{1}{4}$ -inch scale.

Subject XVIII.

(a) The Organ-case in the Circular Hall (see Subject XVII. (a)). The longest pipe to be 32 feet.

Drawings required.— $\frac{1}{4}$ -inch scale with some details to not less than $\frac{1}{4}$ full size.

(b) A Group of small Dwellings for 12 aged couples, to be considered from a practical point of view. Each Dwelling to consist of at least two rooms. A Common Dining Hall and Kitchen offices to be provided. Site having a frontage of 80 feet looking S.E., on the outskirts of a town.

Drawings required.— $\frac{1}{4}$ -inch scale, and details of different portions to $\frac{1}{2}$ -inch scale.

Dates for Submission of Designs in 1914-1915.

	Subject XVI.	Subject XVII.	Subject XVIII.
United Kingdom	31st Aug.	31st Oct.	31st Dec.
Johannesburg	31st Oct.	31st Dec.	28th Feb.
Melbourne	30th Nov.	31st Jan.	31st Mar.
Sydney	30th Nov.	31st Jan.	31st Mar.
Toronto	30th Sept.	30th Nov.	31st Jan.

The Final: Designs approved.

The Board of Architectural Education announce that the designs submitted by the following students who are qualifying for the Final Examination have been approved:—

SUBJECT XIV.

(a) DESIGN FOR COUNCIL OFFICES.

Alison: W.	Gray: G. H.	Macmillan: A. L.
Allen: G.	Gregory: H.	Matthews: J. B.
Allison: W.	Grellier: C.	Moore: R. S.
Ap-Gruffydd: C. O.	Griffiths: W.	Mortimer: A. L.
Armstrong: J. R.	Hague: H. V.	Moscrop: W. N.
Battiscombe: H.	Hamilton: A. B.	Mowat: D. G.
Blackford: J.	Hart: E. J.	Pace: C. L.
Bowes: R.	Head: G. L.	Pennington: W. F.
Brooks: C. J.	Hemm: G.	Robinson: N. S.
Broomhall: T. H.	Hossack: J. D.	Rose: G. A.
Brown: J. M.	Howcroft: G. B.	Rowntree: C.
Callender: C. W.	Jackson: R.	St. Leger: C. D.
Carreras: L. E.	Jacob: J. H.	Shenstone: G.
Charles: H. L.	James: C. H.	Stainsby: G. P.
Davies: H. F.	Jenkins: T. T.	Stedham: P. N.
Duncan: R. A.	Jepson: H. N.	Stott: A. E.
Dyson: V.	Johnson: A. G.	Takekoshi: K.
Eaton: G. M.	Jones: L. F.	Taylor: J. A. C.
Evans: T. C.	Jones: W. O.	Terrell: W. E. W.
Fernyhough: S.	Kassem: H. Z.	Tomlinson: L. D.
Foote: C. A.	Koch: M. D. N.	Triscott: H. S.
Forbes: A. S.	Langdell: G. A.	Waleh: J. B. M.
Ford: L. S.	Langrish-Tove: F.	Walker: H. F.
Fraser: R.	Lavender: E. C.	Weekes: N. B.
Freaker: A. L.	Lawton: W. V.	White: P. G.
Garrett: S. G.	Leadham: G. S.	Whitehead: H. M.
George: B.	Lister: H. A.	Wilson: J. F.
Goeder: F. E.	Loweth: S. H.	Woodroffe: N. F.
Gossling: H. F.	Lyne: D. R.	Young: W. C.

(b) DESIGN FOR CHURCH SPIRE.

Barley: F. A.	Dickinson: J.	Owen: A. H.
Cheek: C. C.	Fyfe: J. S.	Robertson: M.
Craske: C. W.	Hendry: M.	Toothill: J. E. P.
Crossland: H. E.	Mackenzie: K. B.	

Designs for other subjects from the following candidates have also been approved:—

Binnie: W. B.	Gostling: W. B.
Derry: D. C. L.	Omar: I.



SEMUR

AN ARCHITECTURAL TOUR IN CENTRAL FRANCE AND BURGUNDY.

By W. S. PURCHON, M.A. [A.]

Read before the Sheffield Society of Architects and Surveyors, at the University of Sheffield, 12th March 1914.

FOR one of the youngest of the English Schools of Architecture to arrange a three weeks' tour in France as a summer vacation course was rather an ambitious undertaking. A particularly interesting programme succeeded, however, in attracting a sufficient number of students to make the tour possible, and the very able leadership of Dr. G. H. West [A.], of which it is impossible to speak too highly, and the persistent brilliance of the weather, combined to make the venture an unqualified success. All the numerous difficulties connected with hotels, railways, etc., inseparable from such a tour, vanished with the appearance of Dr. West, while the R.I.B.A. travelling cards, and the official permissions with which the members of the party were provided, proved a veritable "open sesame" to every storehouse of priceless treasure visited.

TROYES.

We will begin with the cathedral at Troyes, a building which was commenced about 1200, and not

completed when the seventeenth century was well advanced. It has double aisles to the nave and choir, a single aisle with radiating chapels at the east end, aisleless transepts of slight projection, and ten side chapels arranged between the buttresses of the nave. Internally, an early example of the fully developed oblong vault may be seen, and a glazed triforium with an open arcade in front of the glass runs right round the church. In the nave strong ribs are brought right down to the floor from the vault, but in the choir—a fine example of early Gothic—each rib brought down from the vault rests on the capital of a small detached shaft in front of the main pier. The church contains fine stained glass, mainly of the fifteenth and sixteenth centuries—there is a great deal of sixteenth-century glass in the various churches of Troyes—and a somewhat toy-like baptistery screen of the time of Henry II. Externally, the main feature of interest is the sixteenth-century west front, with three great portals, the central one surmounted by a fine rose window, and two towers, of which the southern one is unfinished.

This west front is principally of the Flamboyant type, but the influence of the Renaissance may be seen in the upper part of the north tower, in the arabesques in the panels of the portals, and in the internal arches at the west end. The Flamboyant work here is much more architectural than in some examples.

The Church of St. Urbain, built between 1262 and 1266, is for its date a remarkably light and delicate construction. The capitals in the interior are more like fourteenth than thirteenth century work, and in some parts capitals are omitted as in Flamboyant work. The lightness is, if anything, overdone, the whole building having a rather thin and wiry appearance, and the double set of tracery at the east end is somewhat confusing. There is no triforium, the clerestory coming close down to the main arcade, the choir being practically a glazed screen from top to bottom. Viollet-le-Duc was responsible for much of the western part of the church.

The Church of the Madeleine, built early in the thirteenth and enlarged in the sixteenth century, is principally famous for its remarkable rood screen of 1508. The construction of this screen is Late Gothic of a rather unfortunate type, but somewhat clumsy Italian ornament is introduced in the form of shells, bead and fillet enrichments, and arabesques.

The Church of St. Jean was built in the second half of the fourteenth century, but was damaged by fire at a later date and rebuilt in parts. A good deal of the building is Flamboyant Gothic, with arch moulds and vault ribs dying out on piers of "wavy" plan and having no capitals. Some of the tracery is a curious form of Flamboyant, but other windows contain tracery of a very classic type.

St. Pantaleon is a remarkable example of sixteenth and seventeenth century work. It contains Flamboyant tracery, a staircase and a south door of the same style, and there are pointed arches in the lower story of the apse. There is an interesting early Renaissance stair with Italian medallions and arabesques; the piers are of the "wavy" Flamboyant type at the bottom, but at the top the "waves" decide to be flutes, and the piers support great Corinthian capitals and a Classic cornice, while the gallery and triforium are interesting examples of Early Renaissance work. Some of the altars in the side chapels remind one of Jacobean fireplaces, but the wall treatment in other cases is more formal.

The Church of St. Nizier is principally of the sixteenth century, and some of its features show clearly some points in the development of the Renaissance. The south door, for instance, is Flamboyant, with Renaissance touches in the form of cherubs' heads, etc. The north door is a François I. example, with playful swags one-third the way up the lower shafts and a picturesque timber gable over, while the west doorway is an example of rather more fully developed Renaissance work. The use of the Greek fret on its

lower impost is noteworthy. Internally, Flamboyant and Renaissance tracery, some late seventeenth-century glass, and, in the apse, cherubs and clouds, probably stuck on in the eighteenth century, make a somewhat bewildering mixture.

At St. Nicholas a somewhat similar medley presents itself. The south doorway is a fine example of the style of Henry II., good in proportion, moulding, and ornament, weak in the similarity of treatment of the two stories. In the use of the fret and in general character it is somewhat similar to the west door of St. Nizier. The piers and arches of the interior are Flamboyant, but there is curious Renaissance vaulting to the aisle chapels and over the charming west gallery, and some of the tracery is also of Renaissance type. There is an interesting stair on the north side near the east end.

The Church of St. Martin has the most Classic west front in Troyes, consisting of a great Corinthian colonnade over a simple doorway, contrasting strangely with a lanky wooden bell-turret. In this church again can be seen the struggle between Gothic and Classic, for there is Renaissance tracery, but Gothic arches and vaulting; Doric capitals are used to the piers, and round arches in the lower tier of apse and choir, but pointed ones above. A noteworthy feature in this church is its fine series of stained-glass windows dated 1636.

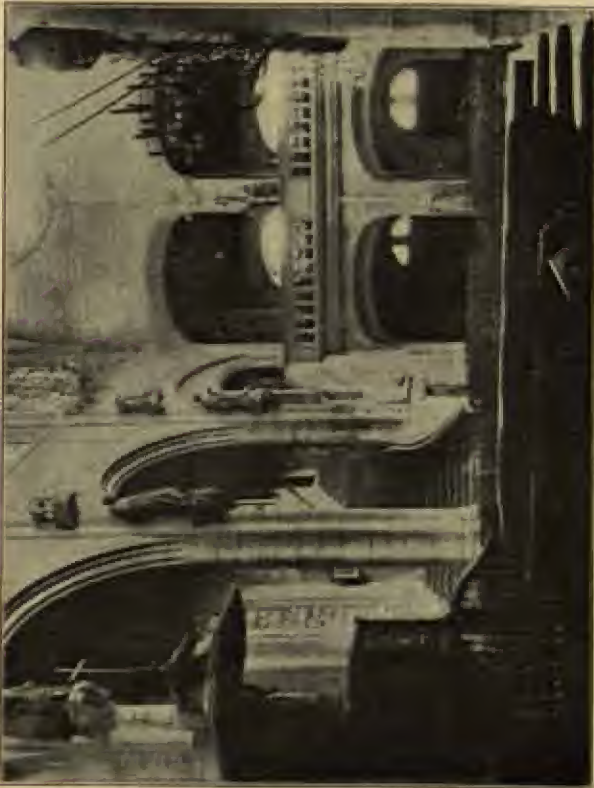
The main part of the Hôtel de Ville, commenced in 1624, is a composition of two orders, the lower one treated as pilasters, the upper coupled columns, both entablatures being broken round the supports. The courtyard contains some interesting "bits" in brick and stone.

The Hôtel Dieu, a simple dignified building of the eighteenth century, forms a quiet background for the display of an extremely elaborate railing and gate.

There are many interesting houses in Troyes, notably the Hôtels Mauroy, Vaulisant, and Marisy. These and the buildings already considered make this town one of great interest to the architect. Its streets of old houses with tiled roofs, and walls in various mixtures of timber, brick, and stone—some not merely overhanging the street, but actually overhanging the houses on the other side—make Troyes a happy hunting ground for the searcher after the picturesque.

SENS.

The cathedral, the chief attraction of Sens, is one of the first of Gothic cathedrals. It is particularly interesting to us because of its connection, through its architect, with Canterbury Cathedral. Commenced in 1140, built in the main in the twelfth century, it was not completed until early in the sixteenth. It is sexpartite vaulted, with heavy transverse ribs of pointed form, the main ribs being supported on massive piers with great shafts running right up from floor to vault, while the intermediate ribs are supported on coupled columns, with the vaulting shafts



SAINT-NICHOLAS, TROYES.

Photo: Rev. A. E. Alden.



CATHEDRAL, TROYES.

Photo: Rev. A. E. Alden.



HOTEL DIEU, TROYES.



WESTERN DOORWAY, TROYES CATHEDRAL.

Photo: Rev. A. E. Alden.

resting, in the manner unfortunately usual in early French Gothic work, on the capitals, which in this case still show traces of their Classic origin. The triforium is formed with coupled arches under coupled containing arches. Practically the complete development of French windows can be studied here. There are great round arched windows in the aisles; lancet windows in the west front; geometrical tracery at the east end, the west front, and in the clerestory; Flamboyant windows are to be found in the transepts, and Renaissance examples in the apse chapels. The north tower is incomplete, but the southern one rises to a good height and is completed with a Renaissance cupola. The three portals of the west front have good sculpture in the tympana and in statuettes, fine mediæval arabesques being carved on the sides of the dividing pillar of the central doorway. The door in the south transept is Late Gothic, with a great window over it; the railings here date from 1762.

To the south of the cathedral are the official buildings, which were restored by Viollet-le-Duc. The huge roof is covered with brilliantly coloured tiles arranged in geometrical patterns, which one hopes will be less painful to the eyes in a hundred years' time. In the lower part of this building are the dungeons and the Judgment Hall, now containing a collection of remarkable Early Renaissance canopies removed from the cathedral. The vaulted synod hall on the upper floor has been very considerably restored.

The Archbishop's Palace, built to the south of the south transept in the sixteenth century, but restored about 1898, is an excellent example of the Early Renaissance blending of Late Gothic and Italian features. The doorway to the street is particularly pleasing. The later wing, of the time of Henry II.—lacks the charm of the earlier work, but makes up for this in the minds of some by increased restraint and a somewhat closer adherence to Classical methods.

In a convent garden in the suburb of St. Savinien, shut out from what little life there is in Sens, a persevering explorer may, or more probably may not, discover the Church of St. Savinien. This interesting building of the eleventh century has been restored in parts, but a good deal of the old work remains. The crypt and some of the columns are probably of earlier date than the eleventh century.

In another retreat almost as peaceful as the convent gardens in the same suburb may be found the chapel of St. Jean, once an abbey chapel, now the chapel of a hospital. While in the west end some Renaissance and modern alterations have been made, and round arched wall arcades and Flamboyant windows appear; elsewhere the main building is a fine example of thirteenth-century work, containing excellent capitals of the period. It has a nave of wide span with a simple quadripartite vault, and an apse with an ambulatory and central chapel. There is no triforium, but a passage way is arranged round the windows. The hospital is an eighteenth-century building, with good

dormers in its mansard roof, and shady, restful cloisters.

The Church of St. Maurice, on an island in the river, built with piers alternately large and small with some good early capitals, was evidently intended to have a sexpartite vault, but the present vault is a Late Gothic one with good bosses, some of which show in their strap work indications of the Early Renaissance, which also show in some of the tracery. The exterior, with its *flèche* and a long tiled roof terminating at the east end in half-timber gables, is distinctly picturesque.

St. Pierre, a church built in the thirteenth and sixteenth centuries, contains in the earlier part, single, two-light, and three-light lancet windows, also two-light windows with openings pierced in the heads below the dripstones. It has an aisle of Flamboyant work, and panelling, reredos, and ironwork of the Renaissance period.

There are other interesting examples of architecture of various periods in Sens, such as the Lycée Nationale with a good Late Renaissance façade, and the half-timbered Maison d'Abraham and Maison Jean Cousin, and in the old Town Hall a fine collection of Roman remains indicates that Roman buildings of considerable importance must have been erected in the neighbourhood.

The new Town Hall * has neither the sincerity of Gothic, the charm of the Early Renaissance, the playfulness of Rococo work, nor the restraint of the Later Renaissance.

VILLENEUVE-SUR-YONNE.

The journey from Sens to Auxerre may well be broken at the little town of Villeneuve-sur-Yonne. The eastern half of the church here was built about the middle of the thirteenth century, two bays in the middle of the south side belong to the end of that century, three bays on the north side to the fourteenth century, while the western part was built in the sixteenth century. The result is somewhat extraordinary. The west front retains the typical French Mediæval triple portals, but they are carried out in classical forms: above the portals great gargoyles project from a block cornice, and the curious rose window is surmounted with a heavy classical archivolt. On the north side, except at the east end, the aisle roofs run more or less accidentally into the clerestory windows, and shops have been built between the buttresses. The more easterly windows are of heavy plate tracery; those of the three bays near the centre are of later and lighter type, while those near the west end have Renaissance tracery. Internally, it may be noted that while all the piers have shafts down to the floor, those in the eastern half of the church are built alternatively heavy and light as if a sexpartite vault had been intended, but a quadripartite one was built. The apse vault is pierced with circular holes, there is a passage way but no triforium chamber, and a "glory" and other Renaissance features have been

* JOURNAL R.I.B.A., 9 February 1907.



Photo: Mrs. A. N. Alston.

SENS CATHEDRAL: PART OF NAVE LOOKING E.E.



ST. MARTIN, AVALLON.



Photo: Mr. H. B. S. O'Leary (A.)

SAINT-PÈRE-SOUS-VÉZELAY.



Photo: Dr. West (A.)

VÉZELAY ABBEY, LOOKING E.

plastered on the spandrels of the apse. At each end of the main street there is an interesting mediæval gateway, but the charm of the River Yonne, part of which is crossed by a sturdy twelfth-century bridge, will probably prove more attractive than the remaining objects of interest in Villeneuve-sur-Yonne.

AUXERRE.

Auxerre is built on a fine hill at the base of which flows the Yonne. So, from the east side of the river a remarkably fine view is obtained of the cathedral, and further to the right, the abbey church of St. Germain, both about half way up the hill and partly hidden by the domestic buildings which nestle snugly against them.

The cathedral was commenced at the east end about 1215, the nave being of the fourteenth century. The crypt, however, is of the eleventh century, and contains fine Corinthianesque capitals and interesting mural paintings. The building consists of a nave and choir with single aisles, transepts, a polygonal apse with an aisle, and a lady chapel of unusual square form. The junction of this lady chapel with the ambulatory is unusually well-managed, two slender shafts being placed in front of it to support the vaulting. In the early work in the choir the vault shafts rest on the pier capitals, there is a simple arcaded passage way with wall close behind at the triforium level, and the clerestory windows contain fine glass. In the nave large shafts forming part of the piers come right down to the floor, but here again the triforium is only a passage, giving a dark shadow only near the piers where the passage is recessed. There is a fine open space in front of the church, so an excellent view can be obtained of the west end, which possesses three richly sculptured doorways and the usual central rose-window. There is a great north tower, but the southern one remains uncompleted.

Of the abbey church of St. Germain the early nave has been destroyed, so that the fine Romanesque steeple is separated from the church. The upper stage of this tower is made octagonal with pinnacles placed over the angles of the square tower stage to mask the change from square to octagon, so that the entased spire rests on an octagonal wall. The steeple is one of considerable beauty, the only doubtful feature being a curious excrescence between the angle buttresses in the upper part of the lowest stage. Notwithstanding the vast number of tombs it contains, the crypt is the most interesting part of the abbey because of its remarkable early capitals, particularly one which is evidently the result of a crude attempt to reproduce a Roman Ionic capital.*

The Church of St. Eusèbe is principally of the twelfth and thirteenth centuries. There are, however, windows of Flamboyant type in the chapels between the buttresses of the nave, and the eastern part of the church is of the sixteenth century, with Gothic construction but semi-circular arches and Renaissance

detail and tracery. The nave arches are pointed, the passage way in the triforium is treated with coupled pointed arches under semi-circular enclosing arches. Single-pointed windows are used in the clerestory, and the vault is a simple quadripartite example with heavy shafts coming down to the floor. The triforium illustrates to some extent the development of early French Gothic, part of it being rather later than the rest. On the north side of the church is a fine Romanesque steeple, very similar to that of St. Germain, but here the upper part of the tower is not a true octagon, the angle sides being smaller than the others, and the change from square to octagon is formed in the story below by means of a kind of broach.

The Church of St. Pierre possesses a fine Late Gothic tower built between the years 1536-1577. The remainder of the church was begun about 1566 and finished about 1630, and belongs to the latter part of the Early Renaissance. The west front is an elaborate more or less classical composition, consisting of three tiers of coupled columns with niches between. The lower order is Ionic, the upper ones Corinthian and Composite. The window immediately above the central doorway is pointed, but all the others are either circular or semi-circular headed, and all, except the one in the gable, have tracery. The flying buttresses are treated in classic fashion with niches and curved pediments. The doorway with niche over near the west end of the south side is beautifully detailed. Internally, the general appearance is Gothic, but in most cases the arches are semi-circular; the circular piers have Corinthian capitals (some unfinished) and the vault has semi-circular and elliptical ribs. The space in front of the church is guarded by a fine, but much decayed, archway built about 1570.

Of the secular buildings in Auxerre there is, first, a fifteenth-century gateway with a clock-tower over. The roof of this is quite new, and most of the work has been much restored. The Museum and Library, once the Law Courts, is a brick and stone building of Late Renaissance type, in which Doric pilasters are used. Its slated roof has conspicuous skylights, and, generally speaking, the building appears to have been considerably spoilt. Interesting Renaissance façades occur in a chapel-like building with a steep roof in the Rue Michelet, another at the end of the Caserne Gonré, and a third to a girls' school. In the Rue de Paris several good Renaissance houses have been turned into shops, and here also, on a corner site, is a fine Renaissance house with a courtyard. In the Rue du Temple, just opposite the Hôtel de l'Épée, an excellent Renaissance house now serves as a café; to the south of the cathedral there is a half-timber house with François I. pilasters, and, at the corner of the Rue Fécanterie, some excellent Early Renaissance carving may be found. The Bureau of Roads and Bridges is a good example of Renaissance work in brick and stone; an earlier example of the use of these materials occurs in the Collège Amyot, the chapel of

* JOURNAL R.I.B.A., 9th November 1901, p. 22.



Photo: Mr. J. R. Wislitz [A.],
ST. PHILIBERT, DIJON: DOORWAY AT SIDE.



Photo: Dr. West [A.],
TOURNUS ABBEY, LOOKING E.



Photo: Mr. J. R. Wislitz [A.],
CENTRAL DOORWAY, W. END, ST. MICHEL, DIJON.



Photo: Dr. West [A.],
NOTRE-DAME, BRAINE.

which is now a theatre. Auxerre, placed upon a hill above the tree-lined banks of the broad river, its fine churches lifting their towers above tiled roofs and chimneys of thin red bricks, is indeed a worthy capital of the Department of the Yonne.

VÉZELAY.

A pleasant motor ride of about ten miles from Sermizelles brings one to Vézelay. To do this in the early morning is in itself excellent, but necessitates spending the previous night—which can be spent to better advantage at Auxerre—at Sermizelles. Vézelay is a delightful old-world little town standing on a hill commanding charming views. The Porte Neuve (a gateway, between two towers, enriched with Flamboyant tracery) and most of the old ramparts remain, and in the town are several interesting old houses and the seventeenth-century clock-tower of the parish church.

The abbey, which stands in the highest part of the town and so dominates it, consists of a nave built in the early years of the twelfth century, a closed narthex of somewhat later date but completed before 1140, and Early Gothic transepts, choir, and a rectangular chapter-house. The narthex—either open or closed—is an important feature in the churches of Burgundy. The chapter-house is a much restored building with a ribbed-groined vault of semi-circular arches supported on two central columns. It is open to a cloister which has a half-barrel vault. For the restoration of the Abbey Viollet-le-Duc was responsible, and it should be said, in fairness to his memory, that when he tackled the building it was in a thoroughly bad condition. The nave—to begin with the earliest part—is an early example of the use of groined vaults, introduced in order to obtain a clerestory above the springing level. The vaulting bays are oblong, so approximately semi-circular cross ribs and stilted wall ribs were used; no ribs are used at the groins, which are awkwardly twisted. Clustered piers are used with shafts coming right down to the floor. There is no triforium, and the vault starts low down to reduce the thrust. Light is obtained from windows high up in the aisles and from the clerestory previously mentioned. The aisles have similar vaults to those of the nave, but the bays being square the problem was simpler. In the Early Gothic choir diminished and entailed circular columns take the place of the sturdy clustered piers; they form, however, poor supports for the vault ribs. Some of the arches in the choir are pointed, but others are semi-circular. The choir triforium with its strong shadow is extremely effective, and may with advantage be compared with other methods of treating this portion of the interior of a church. The thrust of the nave vault had not been adequately resisted, and this seems to have been realised when the narthex was built, for in the latter the vaults are made pointed and the aisles were built in two stories the better to support the nave vault. This, in

fact, is one of the earliest pointed groined vaults in France. There is no clerestory in this narthex, but windows are arranged at the back of the triforium chamber. The sculptures of the abbey are of great interest, the tympanum over the great doors from the narthex to the nave representing Christ bestowing the Holy Spirit upon His disciples. As Professor Simpson states in his *History of Architectural Development*, the sculptures of this period in Burgundy are noted for the fact that the heads are of normal size; usually at this time they were too large. The capitals in the abbey at Vézelay vary very considerably, some following the Classic Corinthian very closely, while others have more of the freedom and vigour usual in Romanesque work. Beneath the choir is an interesting crypt, of which four piers are stated to belong to an earlier church. Others were added when the new choir was built, and further ones in the eighteenth century to support a wall built across the apse. This wall has been removed, but the extra supports in the crypt remain. The west end of the abbey has been considerably restored. There are three doorways, the central one being divided by a central pier and having a sculptured tympanum. Above this doorway is a great curved pediment of pointed arch form. Of the two western towers only the southern one remains, and of the transept towers the northern has disappeared.

ST. PÈRE-SOUS-VÉZELAY.

At St. Père-sous-Vézelay, rather more than a mile from Vézelay, on the road to Avallon, is the interesting Church of St. Pierre, built chiefly in the thirteenth century. At the west end is a fine open narthex with three portals at the front and unglazed windows at the sides, the vault over it being supported by two internal piers. To the north of the narthex there is a fine tower of about 1240, with many detached shafts, three, for instance, standing on each angle formed by the octagonal upper stage. To the south of the narthex another tower seems to have been intended but not built. The main front gable behind the narthex seems to bear no clear relation to the church, and the use to which the arch started over the central portal of the narthex was to be put is doubtful. Internally, the church is seen to have simple quadripartite vaults, but the aisle bays are longer from east to west than from north to south, giving stilted cross ribs. Alternate vaulting shafts come right down to the floor as if intended for a sexpartite vault, the others stop on corbels above the nave capitals as in much English work. In the apse there are no capitals to the main arcade, and all the vault shafts rest on corbels. Very heavy cross ribs are used in the aisle vaults, and heavy shafts are formed at the back of the piers to take them. The lower joints of the arches in both nave and choir arcade are kept horizontal to correspond with those of the vault ribs. Simple lancet windows are used in the aisles, and, in the clerestory, two-light geometrical windows, which are kept well back from



PARAY-LE-MONIAL.

Photo: Dr. West [L.]



THE CATHEDRAL, AUTUN.

Photo: Rev. A. E. Alston.



SAINT-ETIENNE, NEVERS.

Photo: Rev. A. E. Alston.



DUCAL PALACE, NEVERS.

Photo: Rev. A. E. Alston.

the wall rib of the vault, and a passage way arranged in front, there being no triforium. As the chancel arches are higher than those of the nave, this passage way has to rise in steps which show in front of the west chancel bay. The general appearance of the church, both externally and internally, except at the east end, is very heavy.

AVALLON.

Avallon, charmingly situated on the side of a steep hill, is reached from Vézelay by a motor ride of about ten miles through delightful scenery. A number of its towers and other remains of the old fortifications still exist, together with a much-restored fifteenth-century clock-tower, rising to a great height over a gateway, a number of interesting houses of various dates, a severe Hôtel de Ville of the Late Renaissance, and a Place, which, as Mr. Blomfield says, would dignify any capital in Europe, although Avallon contains but 6,000 inhabitants.*

The Church of St. Martin is an interesting example of Renaissance work, the designer having tried to combine the traditional steeply pitched roof with the flat pediment which was then becoming fashionable. The interior of the church is dark, light coming from a good dome on pendentives near the east end and from side windows also near the east end. The most important building in Avallon is, however, the Church of St. Lazare, which possesses in its west front two Romanesque portals of great richness and beauty. The shafts in these doorways are treated in various ways, some plain, some twisted, and some both twisted and enriched, while round the southern doorway there is a very classic key ornament. The treatment of the drapery of the figures closely resembles that of archaic Greek work. To the north of the west front is a very poor Renaissance tower, entered by a simple small doorway which presents a striking contrast to the earlier ones. The church is vaulted with pointed groined vaults of domical type, but with cross ribs and wall ribs only. The arches are also pointed, and in the clerestory and high up in the aisles are small pointed windows. At the east end of the church are three parallel apses vaulted with pointed semi-domes. To the south of St. Lazare, and entered from it, is the fifteenth-century Church of St. Pierre. Its interior is an unpleasant spectacle, having been much restored and painted.

SEMUR-EN-AUXOIS.

Semur is a delightful old town, beautifully situated, retaining the four towers of its old castle and a mediæval gateway, and possessing several interesting examples of Renaissance secular work. The principal building, the Church of Notre-Dame, is one of the finest examples of Gothic architecture in Burgundy, most of it having been built during the thirteenth century. It consists of a nave with single aisles, a chevet with three almost circular radiating chapels, large chapels off the north aisle, three smaller ones off the

eastern end of the south aisle, and a great open narthex at the west end. Over the crossing there is an octagonal tower and spire, and there are two towers at the west end. Internally, the church suffers somewhat from the narrowness of the nave, which has a quadripartite vault with shafts coming down to the floor. There is no triforium chamber, but a passage way is formed with openings through the piers. The choir has an arcade at the triforium level, and its vaulting shafts rest on an extra piece of abacus worked on the pier capitals. The capitals in this church are particularly fine, and the central boss in the apse vault, representing the coronation of the Virgin, is one of the finest in France. Other features of interest in the church are the eighteenth-century railings, the chapel screens of various dates, Flamboyant, Early Renaissance and Later Renaissance, a remarkably fine ciborium, and stained glass representing various industries. On the portals of the west front is carved a series of animals. Surely Caran d'Ache, the great French humourist, must have seen these before designing the toys he put on the market a few years ago.

DJON.

The Cathedral of St. Bénigne at Dijon belongs principally to the later part of the thirteenth century, but it is interesting chiefly because of its crypt, which dates from the early years of the eleventh century. The first church here was built in the sixth century, rebuilt in the ninth, and again rebuilt between the years 1002 and 1018, and of this church the crypt remains. It consists of a circular space surrounded by a double circle, with eight columns in the inner circle and sixteen in the outer. The capitals of these columns, some belonging to the early part of the eleventh century and others to the end of the eleventh century, are exceedingly interesting.

The Church of St. Philibert was partly built during the twelfth century. It is now used as a storehouse. A small doorway shows classic influence very strongly in its beautiful ornament and Corinthianesque capitals.

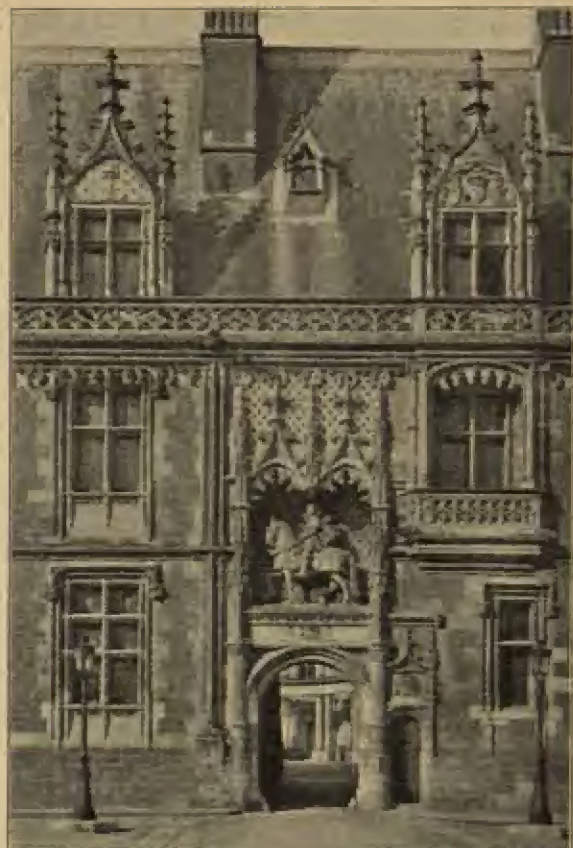
The Church of Notre-Dame, built about 1240, has a great open narthex with two central piers, and a west front remarkable for its extraordinary horizontality, a horizontality given by two tiers of arcades and by the bands of sculpture which separate them. The church is sexpartite vaulted, the vault shafts resting on the octagonal abaci of the crocket capitals to the circular piers. Circular windows occur in the choir triforium, and there is a great circular window without tracery in each transept, the remaining windows being lancets. A passage way is formed in front of the clerestory windows, and the triforium in the nave and transepts consists of three arches supported on two slender shafts in each division with the wall fairly close behind.

The fifteenth-century Church of St. Jean, covered with a timber-barrel vault, has Flamboyant windows in its chapels, but its eastern window has been filled in and covered internally by a great painting.

* *The Mistress Art*, p. 200.



ORLEANS: THE CATHEDRAL.



CHATEAU DE BLOIS: GATEWAY, LOUIS XII. WING.



Photo: Dr. West [A].

OLD HÔTEL DE VILLE, BOURGES.



Photo: Miss Procter.

CHARTRES CATHEDRAL: CHOIR SCREEN.

The west front of St. Michel is a fine example of the attempt to treat the mediæval triple portal with Renaissance forms. The lower part of the work is of the François I. style; the upper part, in which the two towers are treated with a series of more or less classic orders, belongs to a later phase of the Early Renaissance. The interior is principally Late Gothic, with simple vaulting throughout. There is neither clerestory nor triforium to the nave, and in the apse tall windows rise in one height. The aisle windows have Renaissance tracery, and Later Renaissance wood-work surrounds the piers at the crossing.

The Church of St. Etienne, now the Bourse, has a stately classic west front, treated with coupled three-quarter columns, Ionic in the lower story and Composite above, and terminated by a pediment, which more or less conceals the steeply pitched roof behind.

The Carmelite Church of 1630, built at a time when formal classicism was gaining ground in France, is an example of the tendency towards the arbitrary use of architectural forms.

The House of the Ambassadors, No. 38 Rue des Forges, is a somewhat earlier example belonging to the later part of the style of Henry II. In this building architectural forms are used with even less understanding, and the carving is considerably overdone. The Maison des Caryatides belongs to the same period. Ward, in his fine book on the French Renaissance, describes this as a timber house, but its general appearance is very masonic. The Hôtel de Vogüé, of about 1610, is much more pleasing, architectural features here being used with more reason and the ornament used with greater discrimination. The main doorway opens into a well-designed loggia, the only part of the building in which an order is used. The roofs are of coloured tiles in patterns now not displeasing, but once possibly as glaring as those which offend the eye at Sens.

The Palais de Justice, commenced during the reign of Louis XII., possesses a somewhat fussy façade, designed, about 1570, by Hugues Brouhée, who probably also designed some of the houses to which reference has already been made.

In the middle of Dijon there is a great group of buildings facing the semi-circular Place d'Armes. Included in the group are the remains of the fourteenth-century palace of the great Dukes of Burgundy. Part of this palace is now used as a museum, its guardroom containing the magnificent tombs of Philip the Bold and John the Fearless, which together with the Well of Moses in a lunatic asylum in the outskirts of Dijon were the work of the Dutch sculptor Sluter, and were of great importance in the development of art in France. Of the old palace there also remain the lofty Tour de la Terrasse, the Tour de Bar with an interesting Renaissance staircase, and the fine kitchen of about 1450, which reminds one of Glastonbury, but is square, and has two fireplaces on each of three sides. In other parts of the group may be found excellent examples of Renaissance work of various periods,

including the fine eighteenth-century stair of the Palais des Etats.

Before leaving Dijon one or two examples of secular work may well be noted in the Rue Vannerie, such as the delightful oriel of 1570 at No. 86, and the dainty flippant Rococo door at No. 39—an example of the Musical Comedy type of architecture.

BEAUNE.

After Dijon, a town of some 74,000 inhabitants, many churches, fine secular buildings, a busy railway station, and open-air cinema shows, it was a pleasant change to reach the quiet little town of Beaune. Here what was once a fifteenth-century hospital is the place most sought after by tourists. Its main room has a great pointed barrel-roof of timber, and simple lancet windows, but Flamboyant windows occur in the chapel at the end, which also possesses some wretched modern fittings. In other rooms may be seen some interesting Late Renaissance panelling, and an altar-piece, probably by Rogier van Weyden. In the courtyard a quiet Renaissance block with pleasant dormers and an old tiled roof compares very favourably with the much restored earlier buildings, some covered with new blue slates and others with gaudy patterned tiles. There are also in Beaune the remains of a fifteen-century castle, an early fifteenth-century belfry of the old Hôtel de Ville; near the latter an old building, now used as a book shop, which possesses two interesting courts, one Late Gothic, and the other Early Renaissance; a Renaissance church, an eighteenth-century Hôtel de Ville, and the Porte Nicholas of the same period. Of greater importance than these is the Church of Nôtre-Dame of the twelfth and thirteenth centuries. Externally, the leading features are the central tower and the great open narthex, but the interior is more interesting. Here may be noted the central dome supported on half domes in the angles, the ribbed barrel vault made pointed and so exerting less thrust than a semi-circular one, the round-headed windows in the clerestory, the walls of which are very thick to take the thrust, the triforium treated somewhat like a Classic arcade, the pointed main arches, and the fluted pilasters at the front of the piers. There are similar pilasters at the back of the piers, but at the sides three-quarter columns are used.

TOURNUS.

From Beaune we proceeded to Tournus, where there is a remarkably interesting abbey church,* the nave and closed narthex of which were finished about 1019 (with the possible exception of the nave vault, which may date from the end of the eleventh century), the choir, with apse, ambulatory, and three square chapels belonging to the next century. The abbey was once fortified, and is reached by passing between two great circular towers. The exterior of the church, with its

* For a fuller account of this see article by Mr. Clement Heaton, *Journal, R.I.B.A.*, 6th February 1909.

thin pilasters and arched corbels, probably owes something to German or Italian Romanesque influence. In erecting this building a very interesting experiment was tried. The barrel vaults, even when pointed, were not very safe when balanced on a clerestory, so here the barrel vaults were built across the church supported on transverse arches which bring the thrust low down. At the same time, this scheme allows of windows being placed high up in the vault. The half domes to the angles under the central dome are supported on shafts similarly to the arrangement at La Puy. The narthex with a groined vault over its "nave" and barrel vaults over its "aisles" of three bays on each side reminds one forcibly of the scheme of the Basilica of Constantine, while the chamber over the narthex, with a barrel-vaulted "nave" over a clerestory supported by quadrant vaults over the "aisles" is another interesting piece of building work.

PARAY-LE-MONIAL.

The priory church at Paray is very similar to the one at Beaune. It has an open narthex and a very similar general arrangement of the interior, with ribbed pointed barrel vault supported on a clerestory, a somewhat classic treatment of the triforium, a pointed nave arcade, and a central dome with semi-domes in the angles below. Here, however, the fluted pilasters are only used on the face of the piers and not at the back as at Beaune. The abbey church at Cluny is stated to have had much in common with the example at Paray.

There is also at Paray an interesting Early Renaissance town hall with mullioned and transomed windows, panelled pilasters, medallions, shell ornaments, steep roofs, important dormers, and other features usual in work of the period.

AUTUN.

The Roman remains at Autun are extremely important, including as they do the two fine gateways, the Porte St. André and the Porte d'Arroux, a so-called Janus Temple, a stone pyramid, and indications of a theatre and an amphitheatre. Each of these gates consists of two large central arches and a small arch on each side, with a continuous arcade of slender proportions in the upper story, that of the Porte d'Arroux having Corinthian pilasters, while Ionic ones are used in the other example. It seems probable that the treatment of the triforium in some of the neighbouring churches owes something to the design of the upper portion of these gateways.

The Romanesque cathedral at Autun, of which the exterior has been considerably restored, has the usual narthex, this time an open one. The sculptured tympanum over the west door, representing the Last Judgment, is a fine example of the work of the Burgundian school. Internally this church is perhaps the best example of the type described at Beaune and Paray; in this case fluted pilasters are used on

all sides of the piers, and the capitals bear strong testimony to their classic origin. The Early Gothic apse has a classic reredos surmounted by a "glory." The Hôtel Rolin, a fifteenth-century house now used as a museum, the Cavalry School of 1669, with gardens stated to have been laid out by Le Nôtre, the Grand Séminaire with Renaissance chapel and cloisters, the Jesuit College of 1709, the adjoining church of Nôtre-Dame built some fifty years later with the customary pediment-headed Classic front masking a steeply roofed building, a Renaissance fountain near the cathedral, and the remains of the old ramparts, are some of the less important possessions of Autun.

NEVERS.

The cathedral at Nevers, the next town on our list, is perhaps principally interesting because of its Romanesque transept and apse with semi-dome at the west end, which result in a very effective view from the east. The nave and eastern apse are of the fourteenth century, the former having a somewhat English appearance internally, being less lofty than is usual in France. An arcaded passage way is arranged at the triforium level of the nave, but the choir has a glazed triforium. On the south side of the cathedral is a fine Late Gothic tower, and a considerable amount of Flamboyant work occurs on both the south and north sides. The choir possesses some good Late Renaissance stalls and a modern baldachino.

The Church of St. Etienne is more interesting than the cathedral, being based more or less on the Auvergne type of Romanesque, except that here the ribbed semi-circular barrel vault was raised on a clerestory. The internal effect is certainly very pleasing, the dark shadow in the triforium being far more effective than the arcades or passage ways seen in some of the churches previously considered, and the bright lights in the apse contrast finely with the dark shadow under the chancel arch and the softer effects in the nave. The aisles have groined vaults, half-barrel vaults are used over the triforium, barrel vaults over the transept, and there is the usual dome supported on semi-domes at the crossing. The east end shows the typical Auvergne arrangement of semi-circular apse and aisle with three circular radiating chapels, the roofs of the latter intersecting the aisle roof somewhat awkwardly. The southern chapel is apparently largely modern, as a few years ago a larger rectangular building occupied this position.

The Ducal Palace at Nevers, now partly a Court of Justice and partly a Museum, was built in the fifteenth and sixteenth centuries. The Louis XII. stair tower is an extremely interesting example of the transition from Gothic to Renaissance. An indication of the new movement may be noted in the carved draperies. The dormer windows, treated in three different ways, belong to somewhat later times.

St. Pierre is a seventeenth-century church of what was once a Jesuit College. Its somewhat lofty west front is treated with the Doric order in the lower stage

and the Ionic above. The church consists of a nave, choir, and transepts, with an apse to the choir and one to each transept, a large square central space being cleverly provided by forming a square compartment in each of the external angles of the cross. The building is barrel vaulted, with semi-domes over the apses, and a dome on pendentives over the crossing.

In the Rue de l'Oratoire may be found what appears to be the west front of a Renaissance church, now in bad condition and apparently used for some unimportant secular purpose.

The Church of Ste. Marie is, if possible, a worse—or, as some might say, a better—example of the Baroque style than the example seen at Dijon. The interior is comparatively plain, but the florid west front is, of course, purely a piece of scenery—more or less architectural.

The Porte du Croux is an interesting example of late fourteenth-century work, while the Porte de Paris is a simple, formal effort of the eighteenth century.

BOURGES.

From Nevers we will proceed to Bourges, where we had the pleasure of staying at the hotel described by Henry James in his *A Little Tour in France*. We will first glance at the famous cathedral, started in the twelfth century, principally built in the thirteenth, and finished in the sixteenth. Externally, the most striking features are the remarkable west front with its five great portals, the western towers, the lateral portals, the great roof unbroken by transept or central tower, and the chevet. The interior is extremely impressive, the aisles adjoining the nave having practically the proportions of an English cathedral nave, possessing on one side main arcade, triforium arcade and clerestory, and on the other the great arcade of the nave. Above the latter, on the nave side, is the triforium arcade, and above that again a great clerestory arranged in the sexpartite vault. It is perhaps curious that in such a lofty building the main defect is the "squatness" of some of the parts. There is some magnificent stained glass here—particularly that in the lower windows of the apse. Late tracery occurs in some of the chapels, and Renaissance detail may be found in the northern tower and in parts of the west front.

The Church at St. Pierre, built between the twelfth and fifteenth centuries, is curious in possessing a sexpartite vault in which each intermediate cross rib comes over the apex of a nave arch, as though the church had been designed for a quadripartite vault. The apse arches are stilted to an extraordinary extent, giving one the impression that the builders had not realized that the stilt necessary with semi-circular arches could be dispensed with when pointed ones were used.

St. Bonnet, a sixteenth-century church, which was undergoing extensive alterations during our visit, is an interesting example of the work of the close of the Gothic period, while the Church of Notre-Dame is a late Gothic building with Renaissance additions.

The House of Jacques Cœur, now the Law Courts, is a fine example of fifteenth century secular work. Most of the roofs are unfortunately of new slates—many in Bourges having been spoilt in this way—and other traces of this hand of the restorer are fairly obvious. In the court is an excellent Late Gothic stair tower, while at the back of the building, against the suspiciously modern-looking walls and towers of the ancient fortifications, there is a remarkably fine statue of Louis XI.

The Old Town Hall, now a school, possesses a quiet, dignified, Renaissance wing, and a Late Gothic stair tower. While this has carved figures apparently looking out of sham windows, as in the front of the House of Jacques Cœur, the general treatment is much freer than that of the stair at that house. These two stair towers may with advantage be compared with the one at Nevers, and with the one to which we shall presently come at Blois.

The Hôtel Cujas—now a museum—is a good example of Late Gothic and Early Renaissance work, while the Hôtel Lallemant is a charming Louis XII. building, with fine fireplaces, stairs, stair turrets, doorways and other features. Italian influence is observable in the series of heads and in the freely treated orders, while the strength of the mediæval tradition shows in the mullioned windows surmounted by dripstones.

The Late Gothic building in the Rue des Toiles has a rather mysterious appearance until one discovers that it was not designed to be looked at from straight opposite, but sideways from the main street, into which the Rue des Toiles enters at an obtuse angle, all the mouldings having been distorted apparently with this object.

Other buildings worthy of note in Bourges are the Hôtel Dieu, a Late Gothic and Early Renaissance building, with Later Renaissance wings and a restful courtyard, the half-timber Maison de la Reine Blanche, and the Porte d'Ursin, a twelfth-century gateway, with a finely sculptured frieze.

BLOIS.

The Church of St. Nicholas, at Blois, adjoining a quietly designed Renaissance hospital, is an interesting building of the twelfth and thirteenth centuries, which has suffered somewhat in the process of restoration, the central and two western towers being surmounted with new spiky spires. The church consists of a nave with aisles, a transept, a choir with double aisles, and an apse with single aisle and radiating chapels. With the exception of the wheel windows at the west end, simple pointed windows are used throughout. In the capitals of the interior may be seen the curved lower abacus and traces of the centre flowers of the classic prototype.

The cathedral is a building of Gothic construction; but possessing much Renaissance detail. Renaissance influence shows most clearly in the tower, which is treated with the orders and terminated by a

cupola, and in the heavy horizontal panels in the triforium.

The Church of St. Vincent, built during the first half of the seventeenth century, freed itself almost completely from the shackles of the old building faith, and tied itself very securely with those of the new one. Its interior is slightly less ugly than its three-storied west front and its dome.

From this example one passes with pleasure to the Louis XII. Hôtel d'Alluye in the Rue St. Honoré with its delightful arcaded court embellished with Italian medallions, charmingly carved perforated shutters, and fine chimney-pieces.

From the upper end of the Rue St. Honoré a fine view can be obtained down the Rue Denis Papin to the bridge over the Loire, designed by Gabriel, from the centre of one side of which rises a somewhat curious obelisk.

Of the Château at Blois a certain amount dates from the thirteenth century, and there is also a fifteenth-century chapel which looks remarkably young for its age. In the Louis XII. eastern wing the Italian influence shows mainly in the strength of the horizontal line and in a few details. In the northern wing of 1515-30, with its famous staircase, the traditional methods of building show in the mullioned and transomed windows, in the great dormers and chimney-stacks, in the steep roof, and in the general freedom of treatment, while the influence of the Italian school shows in the pilasters with arabesques and in other details. In the western wing of 1635-40 may be seen the triumph of the Italian forces, not quite complete, perhaps, for the steep roof is still retained, but the exact symmetry of the design and the "correct" use of the orders show that mediæval ideas have given way before the onslaught of the rules and regulations of the later Renaissance. Part of a great movement this, for people were even getting more formal in their conversation. Now an attempt is being made to run a formal movement in architecture against the current, for in all other branches of art and in life itself we are surely getting less and less formal.

ORLÉANS.

The Cathedral of St. Croix, the rebuilding of which began in 1601, seventy years after the completion of the famous staircase at Blois, is a remarkable example of the persistence of Gothic, for while its horizontal lines are stronger than in Gothic work, and some of its features clearly belong to the Renaissance, the general schemes both of construction and of decoration are clearly mediæval.

Other examples of ecclesiastical work in Orléans are the Late Gothic churches of St. Aignan and St. Euverte; St. Pierre, a mediæval building containing good Renaissance woodwork, and the Late Gothic and Early Renaissance churches of St. Paul and Notre-Dame de Recouvrance. The secular work in Orléans is, however, far more interesting than the ecclesiastical,

the leading examples being the brick and stone Hôtel de Ville of the time of François I., the Maison d'Agnes Sorel (Musée Jeanne d'Arc), a Louis XII. building with a delightful arcaded court of the François I. style, the Musée Historique of somewhat later date, the Musée de Peinture of the Louis XII. period, and some extremely interesting Early Renaissance shops. At the other end of the scale, but almost equally interesting, are some of the modern shops in the Rue de la République.

About 1750 a fine bridge was built across the river, and in continuation of this a main road was carried through to a square in the middle of the town. From this square two main roads branch out, one leading to a fine open space, and the other now leads direct to the railway station, which can thus be seen from the square. Near the bridge a road cut diagonally leads to the market and incidentally gives a fine view of the cathedral, while from the main road just south of the square a wide branch road leads direct to the west front of the cathedral. The scheme of roads, together with the fine boulevards, adds considerably to the efficiency of Orléans.

CHARTRES.

Chartres is a city of many attractions quite apart from the cathedral. Of these the principal are the Church of St. Pierre, with its wide nave and narrow aisles, glazed triforium to the choir, fine stained glass and its enamels; the Late Gothic and Early Renaissance Church of St. Aignan; the ruined Church of St. André; the mediæval Porte Guillaume, the half-timber stair turret of the crèche communale, the similarly constructed Maison du Saumon; the Hôtel de Ville of the seventeenth century, largely constructed of brick, the narrow and lofty Maison du Docteur, and the late eighteenth-century gates of the Hôtel Dieu.

Of the cathedral it is difficult and perhaps unnecessary to write. It was principally built between the years 1194 and 1260, though much of the great crypt is of earlier date. It has single aisles to the nave, double aisles to the choir, and double aisles and radiating chapels to the apse. For France the transepts have a bold projection. It was one of the first churches to be covered with a pointed vault with groin ribs over oblong bays. The ribs of the vaulting are brought down to the ground, and its thrust is taken by curious wheel-like flying buttresses. The triforium is comparatively small, but there is a fine clerestory, the windows in which are formed in two lights with a great circle above. The building is somewhat low for its width in comparison with other great French churches, but the general effect of the interior is most impressive, owing principally perhaps to the wonderful stained glass.

The two spires of the west front are fine examples of early and late methods of spire design, the southern one being started about 1110 and finished about 1170,

while the northern one was not finished until the sixteenth century. The fine sculptures of the early western doorways, the even finer sculptures of the great lateral portals, the wonderful Late Gothic and Early Renaissance choir-screen with its forty-one groups of sculpture, and the thirteenth-century glass, make this cathedral one of the most important of the legacies we have received from the past. A most impressive sight is the view of the western portal when the great doors are open in the afternoon. The sun shines full on the west front, and through the mysterious, gloomy interior beyond may be seen a few jewel-like lights twinkling in the stained glass at the extreme east end.

And here at Chartres our tour has come to an end. Before entering the railway station we take another look at the spires of the cathedral and realise that the thunderstorm of the morning has but served to make the afternoon if anything more brilliant than previous ones, and our coming glimpse of Versailles and Paris clearer and sweeter. On the journey home we all conclude that the tour has been an interesting and useful one. Good examples of Roman work have been seen, and examples showing how mediæval detail was gradually evolved from it. We saw something of that great struggle with structural difficulties which led to the glories of the thirteenth century, and learned that the mediæval builder was not a mere copyist of earlier work, but endeavoured to solve the special problem put before him. We were charmed with the playful fancies of the time when the archi-

tects turned again for inspiration to classic examples; some of the work of the later Renaissance impressed us with its beautiful proportion and quiet dignity; while from Baroque and Rococo examples we learnt to appreciate the value of restraint. Of the modern work we saw, some called for admiration, while other examples made us feel the necessity for hesitation before plunging recklessly into copyism of French methods. In some of the little towns we were charmed with the retention of the mediæval feeling, in others we admired the courage of those who had carried out schemes of town planning. Fine broad roads flanked by stately buildings, well-treated boulevards and open spaces arranged with clearness of thought and far-seeing eyes, the railway station standing—not naked, but unashamed—at the end of a main street leading into the town, the modern entrance boldly taking the place of the Roman arch and the mediæval gateway.

But as we approached Southampton in the early morning and watched the sun climbing up the heavens and dispelling the morning mists, we were probably thinking not so much of the Roman remains at Autun, and how from these and similar structures the Romanesque architects evolved their buildings, making them suitable for the special needs of the place and time, or of the new light which came in later years from Italy, turning the attention of the designers once more to the great works of ancient time, but rather were we looking forward into the future, picturing ourselves meeting again on a similar tour in South France in the autumn of 1914.



L'HÔTEL LALLEMAND, BOURGES.



SANTA SOPHIA, FROM THE SOUTH-WEST.

THE GREAT CHURCH OF SANTA SOPHIA, CONSTANTINOPLE.

By CHARLES GOURLAY, B.Sc. [A.], F.S.A.Scot., Professor of Architecture,
The Royal Technical College, Glasgow.

THE Church of Santa Sophia (Agia Sophia), Constantinople, the greatest monument of the Byzantine style of architecture, crowns the promontory which forms the site of the ancient town of Byzantium. † This promontory has its shores washed by the waters of the Golden Horn, the Bosphorus and the Sea of Marmora. It was named Byzantium by Greeks who first occupied the site in 658 B.C., and erected protecting walls on the land side. By the beginning of the fourth century A.D. the town had greatly decayed, and Constantine the Great, the first Christian Emperor began to rebuild it. He doubled Byzantium in size, erected new land walls, and inaugurated the enlarged city in 330 A.D. when he made it the capital of his empire in place of Rome.

The date generally accepted for the rise of the Byzantine style coincides with the inauguration of the enlarged city, and the style reached its culmination by the building of Santa Sophia. In the Parthenon, Athens, the Greeks showed how perfection in architecture could be reached by the use of the lintel to span the openings of a building. In Santa Sophia, their descendants, the Byzantines, showed how a perfect building could be erected by the employment of the semi-circular arch for the same purpose. For, throughout the entire edifice, all openings are covered by the arch, while its internal areas are all roofed by vaults or domes which are but developments of the arch. In fact, the universal use of the arch, vault, and dome is the chief characteristic of the Byzantine style, and this

feature is perfectly expressed in Santa Sophia, which was known in the time of Justinian, its builder, as "The Great Church" because of the magnificent scale upon which it had been designed and built. Although later Byzantine churches had great beauty of proportion, composition, and detail, yet, owing chiefly to their being of relatively small size, they are unimportant in comparison with Santa Sophia. As its design was never repeated, it is, therefore, the one monument representative of all that is best in the Byzantine style, and on this account demands the closest study. The church was not dedicated to a saint, but to Christ, the Second Person of the Trinity, as the Word of God—the Divine Wisdom,

for ΑΓΙΑ (Agia) is Greek for Divine and ΣΟΦΙΑ (Sophia) for Wisdom.

The present is the third church built on this site. The first may have been founded by Constantine, but it was built during the reign of his son and successor, Constantius, being dedicated by him in 360. It was basilican in plan, probably had its entrance towards the East, and was destroyed by a fire in 404. The second church was dedicated in 415 and burnt down in 532. Upon its ruins the present church was begun on 23rd February 532, only forty days after the burning of the second church, and it was built in five years and ten months, being dedicated on 26th December 537. Such rapid building, however, was not conducive to permanence, as is evident by the many large buttresses which have been built in course of time round the exterior to uphold the fabric. Such buttressing was not required in so far as the stability of the edifice as a design is concerned. The whole forms one perfect piece of architectural design in construction which, given adequate attention in the way of protection from the elements, only earthquakes or destruction by violence could overthrow. Owing to the first and second churches having been destroyed by fire, Justinian gave instructions that no wood was to be used in the new fabric. Hence



Fig. 1. SANTA SOPHIA, FROM THE EAST.

Photo: Schach.

the entire building is covered with vaulting which forms a true roof, and the thrust of every arch which is supported by columns, is withheld by iron rods placed at the springing of the arch. These iron rods took the place of wooden planks, previously in general use for this purpose, which may still be seen in some buildings, such as the Church of St. Demetrius, Salonica.

The architects of Santa Sophia, Anthemius of Tralles in Asia Minor, and his nephew, Isidorus of Miletus, were both Greeks. The credit for the conception of the design is generally given to Anthemius, who deserves to rank equally high with Ictinus, the architect of the Parthenon, for both were architectural geniuses of the premier order.

The great internal beauty of Santa Sophia resides in and springs from its remarkably original

plan, which is often referred to as being a synthesis of the plans of well-known buildings then existing. Therefore, to enable a true appreciation to be formed of its marked superiority, it is necessary to refer to such plans and interiors of temples and churches as might have influenced Anthemius in making the design.

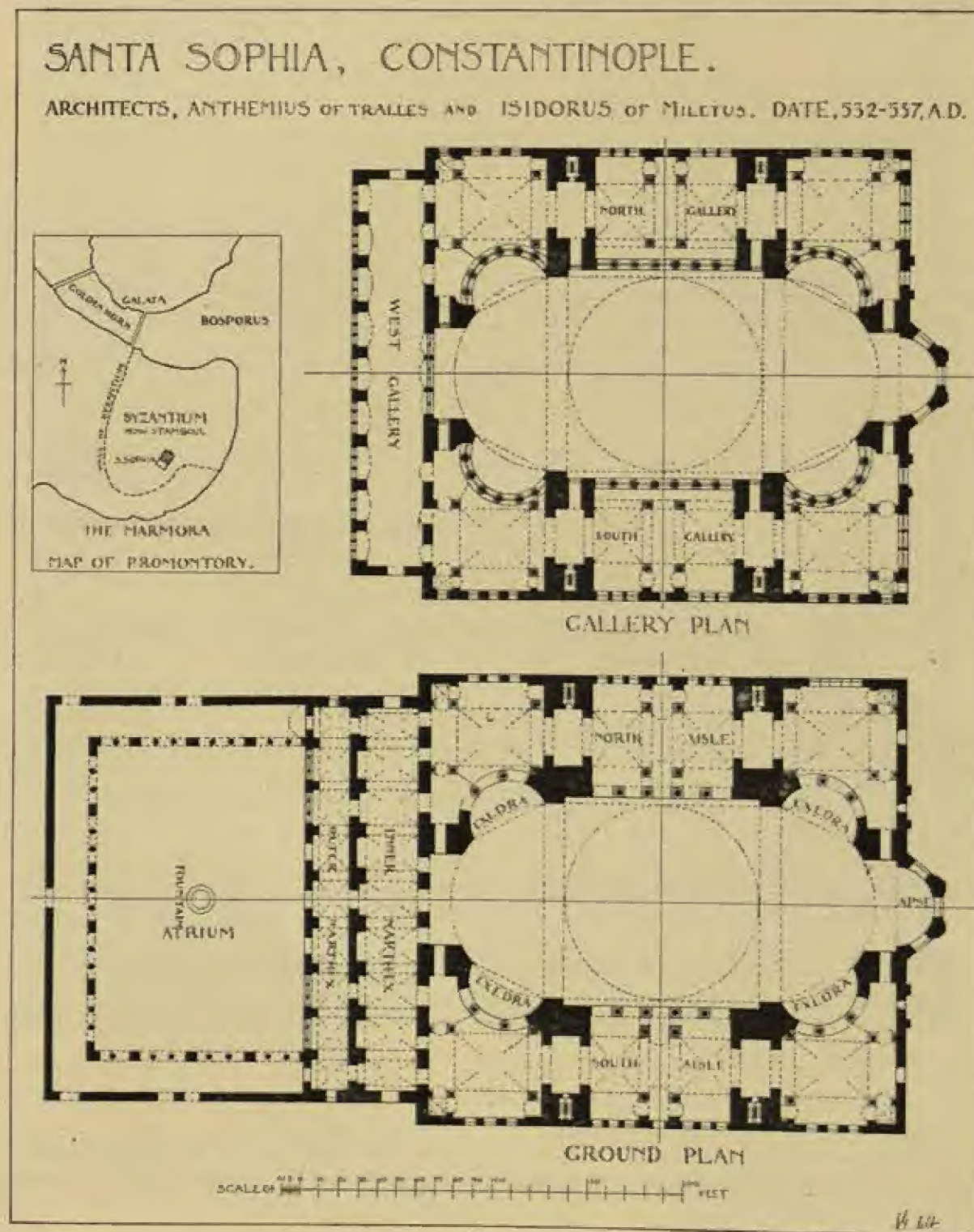


Fig. 2.

The plan of the Parthenon (the temple of the Virgin goddess of Wisdom) at Athens, which dates from 488 B.C., shows how, in Greek temples, emphasis was given to their exteriors by surrounding the naos with columns. Internally the figure of the goddess was the centre of attraction, and the level lines of the entablature on the row of internal columns on each side of the naos led the eye of the worshipper to the statue. In the basilican type of Early Christian church, such as that of San Paolo fuori le Mura, Rome, circa 380 A.D., internal, not external, effect was the aim of the builders, and the rows of columns in the interior led the eye to the most sacred part, the bema and apse, where the altar was placed. On each side of the central square of Santa Sophia there is a row of columns, which, aided by the strong lines of the cornice, leads the eye eastward in the same manner.

Both Greek temples and Early Christian basilicas were roofed with wooden trusses covered externally with tiling, either of marble or burnt clay. Internally the effect of these trusses, or of a panelled ceiling attached to their tie-beams, was depressing compared with the effect of a vaulted interior, and still more so in comparison with a magnificently domed interior like that of Santa Sophia.

The Pantheon, Rome, 123 A.D., is an example of a Roman temple of circular plan roofed by a dome and lighted by an uncovered opening at its summit, a method of lighting which is perfect æsthetically, but from the practical point of view is most unsatisfactory. The dome fits its rotunda quite naturally, as does also that of the church of St. George at Salonica, circa 400 A.D., where, however, the light came from lunettes placed just above the springing line of the dome and also from vertical windows in the wall of the rotunda.

The intrados of the dome of the Pantheon is deeply coffered, giving an impressive effect of great grandeur. It is now bereft of its bronze rosettes and its colouring, which no doubt originally went far to prevent that feeling of heaviness felt at the present day by the spectator when he views this finest of all Roman interiors. The intrados of the dome of St. George's, which is little more than half the diameter of that of the Pantheon, being 79 feet instead of 140, is enriched with the greatest and best work in Byzantine mosaic that has come down to the present time. Here the colour treatment adds beauty to the interior, which, in this sense, is a distinct advance upon the Pantheon. In Santa Sophia there is a central dome covered with mosaic, which is fully two-thirds the size of that of the Pantheon, being 107 and 140 feet respectively, and, as designed by Anthemius, had sixteen vertical windows at its base. This large central dome rests upon four piers at the corners of a square. To enable a dome to rest upon a square substructure, pendentives are built projecting from the inner corners of the square below to a circular plan above. These form concave curved surfaces of triangular shape having the base, a quadrant of a circle, upwards, and the apex downward. There is no known example of the pendentive, or of anything similar to it, on a large scale of earlier date than Santa Sophia. The dome itself may be the continuation upwards of the curved surfaces of the pendentives, as was the first dome of Santa Sophia, or of another form, such as a hemisphere, placed directly on the top of the pendentives, as is the dome we now see in Santa Sophia.

The nearest approach to the pendentive is the very rudimentary one in the hall of the Nymphæum of the Baths of Gallienus, erected in Rome in A.D. 268-269. It is remarkable that with this example in existence, the church of San Vitale in Ravenna, begun in A.D. 526, should have the junction of its dome and octagon formed by small squinch arches instead of by the use of the pendentive. So also in the church of SS. Sergius and Bacchus, Constantinople, begun A.D. 527; the junction of its dome with the octagonal substructure is not particularly happy, owing to the lack of pendentives. Here a squarely-planned church is converted into an octagon internally, although the effect of a square is retained by exedras placed in its angles. Because of its resemblance to Santa Sophia, this church is called by the Turks, Kutchuk Agia Sophia, that is, "Little Santa Sophia."

One other type of church plan which may have influenced Anthemius when designing Santa Sophia was that of the church of the Holy Apostles, Constantinople, built originally by Constantine and rebuilt by Justinian, which was destroyed by the Turks in 1463-69, but as its plan has been

followed in the church of St. Mark, Venice, 1063-1071, this description will apply to both. It was a Greek cross in plan and had five domes, one being central, and one over each arm of the cross. These domes were, however, independent of one another, whereas in Santa Sophia the great central dome is



Fig. 8. SANTA SOPHIA. INTERIOR SHOWING LOWER AND UPPER ARCADES.

Photo: Sibak.

supported by two half-domes of the same size as the large one, which all open into one another and form a most effective whole.

The outline of the plan of Santa Sophia, excluding the narthex and apse, is nearly a square, being 235 feet north and south by 250 feet east and west. Directly in the centre is an exact square of 103 feet length of side, over which is the great dome which has a diameter of 107 feet. At the four corners of

this central space are massive piers between which are arches spanning both ways, and resting on these arches are the pendentives forming the junction between the circular base of the dome and its square support.

A dome exerts thrust equally all round the circumference of its base. The pendentives gather this thrust and distribute it to the extrados of the four arches, which, in turn, gather the entire thrust into the four piers. But as piers cannot resist side thrust of any great magnitude it is necessary to arrange that the slanting thrusts brought by the pendentives and arches to the piers be otherwise met. The lines of these thrusts are on the extended diagonals of the central square, and to place supports in such a position would have been the simplest solution of the problem, but fortunately this method of counteracting the thrust was not adopted. Instead, there are great semi-domes placed east and west of the central square which carry the thrusts from these sides of the square downwards through their supporting piers to the solid ground. The eastern semi-dome is pierced centrally by a barrel vault which terminates in the apse. On each side of the semi-dome there is an exedra, which, finishing also in a semi-dome, intersects the larger one, the line of their intersection being straight. At the western semi-dome the arrangement is similar except that there is no apse, the barrel vault terminating directly at the western wall of the church.

To north and south of the central square there are massive buttresses, each 75 feet long by 25 feet wide, which extend across the aisles in line with the great north to south arches. Large though these buttresses are, yet the earthquakes which have occurred from time to time have caused them to give way to a certain extent and to allow those north to south arches to push out the piers, thus causing the weakness which may be observed by the cracks in the structure to-day. There are huge east to west arches which span between these buttresses and show externally. It is from the spandrels on the outer face of these arches that skew arches spring, just below the base of the dome, and carry the thrust of the dome to the buttresses.

Each aisle is 55 feet wide, and although divided into three parts yet is continuous because of the large openings in the buttresses. The number and arrangement of the columns in the aisles produce fine internal effects. These columns support the ground floor vaulting, and they are repeated in number and arrangement in the vaulted gallery above the aisles, which extends round the building, except across the apse. These two stories of vaulting stiffen the main piers and materially aid in supporting the fabric. There are passages in the east and west piers supporting the large semi-domes, which are necessary for the use of the church, for they enable communication to be made between the north and south aisles across the bema in front of the apse, and across the western portion of the nave in front of the principal doorways.

The principle of concentrating the loads on piers and then enclosing the whole space by a wall is that displayed by the plan of this church. This is further shown by the remarkable manner in which the thrust of the semi-domical vaults of the aisles and gallery are counteracted. On the sides of the rectangle bounded by these vaults, each of which rests upon four pillars, there are barrel vaults which form arches parallel to the four side walls of the church. These barrel vaults take the thrusts and prevent them injuring the stability of the thin outside walls, or of the arcades which run internally on each side of the nave of the church.

The central area, inclusive of bema and apse, measures fully 260 feet in length and 108 feet in breadth between the arcades. The central dome is 179 feet in height from floor of church to intrados at crown, but it was originally some 20 or more feet lower. The first dome fell in 558, a few years after its erection; it was rebuilt by Isidorus, the younger of the two architects, and the church was rededicated in the year 563. Originally, as already stated, the dome had sixteen windows, but the present design has forty, arched between piers, thus giving a ring of light round its base. These piers form the starting points of the brick ribs which show on the intrados of the dome. The ribs gather together on a ring near the crown of the dome, which has a thickness of 24 inches at this part,

according to Salzenberg, the tapering panels between these ribs being also of brick. The dome built by Anthemius was not constructed with ribs, but of brickwork laid in concentric layers.

The city of Constantinople has been the capital of the Ottoman Empire since 1453, the date of its capture. The conquerors recognised the majestic character of the Great Church and made it their chief mosque, at the same time altering the original arrangements of the church to suit their ritual. The Mihrab, or prayer niche, which indicates the direction of Mecca, is not in the centre of the apse,

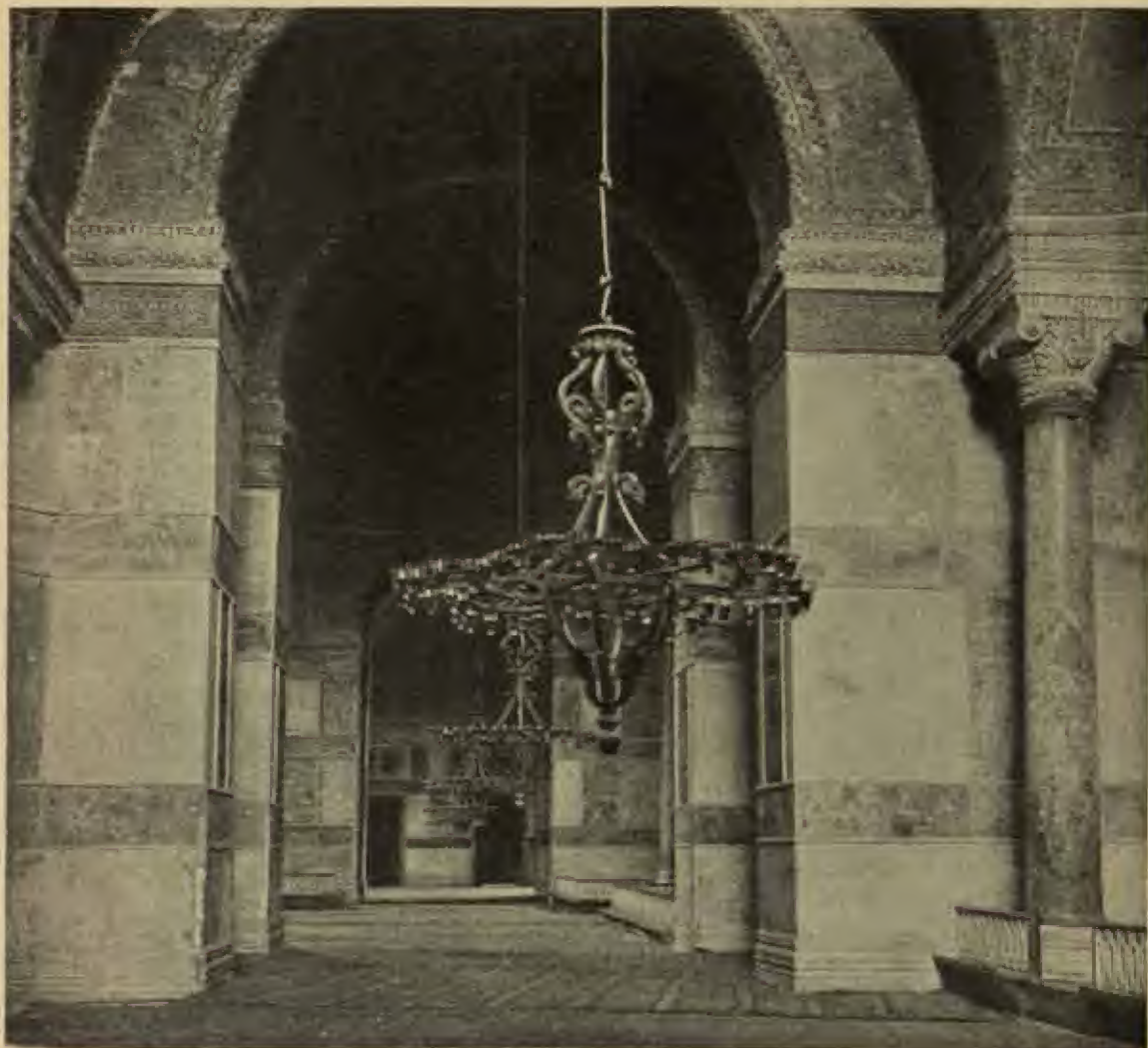


Fig. 4. SANTA SOPHIA, NORTH AISLE LOOKING WEST.

Photo: Schuch.

but to one side; and the fact that the carpets and prayer rugs are not laid square with the interior, but at right angles with the direction of Mecca, are both discordant notes in the interior as it is to-day. To the right there is the Minber, or pulpit, where the prayer is read on Friday for all Islam. Opposite the pulpit is the Sultan's seat or tribune, which is not wholly modern work, for Fossati used up ancient columns, capitals, and slabs found in the church and elsewhere in its design. There are several mastaba, or platforms, for the readers of the Kurân. The artificial lighting is by oil lamps, which produce a quiet illumination probably not very dissimilar in nature and effect from those in use in the time of Justinian. Most pronounced of all the evidences of the occupation of the church by Islam are the huge green shields with golden lettering, affixed to the top of each of the eight main piers upon which the super-

structure rests. The standing letters on these shields are said to be 80 feet in length. Despite these changes, which are really on the surface, the building remains intact, for it has not greatly suffered from its use as a mosque.

The narthex is a large entrance hall, 205 feet long internally by 26 feet wide, which extends along the west end of the church. Its walls are completely decorated with marble panelling having the notched fillet enrichment around the panels, and its vaulting is covered with mosaics. From the



Fig. 5. SANTA SOPHIA, DETAIL OF EXEDRA.

Photo: Sébah.

narthex nine doors give access to the church. Of these, the central door is the largest, being much larger than the others, and is called the *Porta Basilica* or *Royal Door*. This is the door by which the church should be entered, for by doing so the visitor receives the most favourable impression of the interior. The whole interior of the church right up to the crown of the great dome is seen immediately you cross its marble threshold. It is probable that a mosaic representation of the *Pantocrator*—the *Almighty Father*—was originally at the centre of the dome, from which the ribs lead the eye downwards to the ring of forty lights at its base. Next the four pendentives, with their six-winged *Seraphim*,

attract attention ; the great east and west arches, each with its windows in the tympanum under the arch ; the large cornice, on top of which the lamplighter walked in order to light the lamps of the Great Church ; the delightful composition of the two arcades on each side of the nave, the lower having four large columns carrying five arches, and the upper six smaller columns carrying seven arches ; the eastern semi-dome, with its exedras on either side in two stories, having two porphyry columns set on pedestals below, and six marble columns above ; the apse, in front of which formerly stood the



Fig. 6. SANTA SOPHIA, SOUTH GALLERY.

Photo : Harzen.

iconostasis with its three doors and costly high altar behind it ; add the soft yet rich colouring of the marble reveting of all the vertical parts of the walling of the entire building, and the gold-grounded mosaic work—the most beautiful base mosaic could have—which covers all the vaults, domes, and generally the curved surfaces, and then some idea may be formed of the wonderful effect of this magnificent interior.

At the north and south ends of the narthex there are porches. Just outside the south porch was the horologion, so named because a sun-dial stood, and indeed one still stands, there. This south porch

has a very highly enriched two-leaved bronze door, called the Beautiful Gate, which dates from 841. The door itself is of wood, four or five inches in thickness, but is entirely overlaid with bronze plates and enrichments.

There is a single-storied outer narthex parallel to the inner one, which does not, however, contain mosaics, and access between the two narthexes was obtained by five doors. In front of all was the atrium, the remains of which were finally removed in 1873. In the present forecourt there is a Turkish fountain which recalls to mind the existence of the fountain in the atrium of the church.

The external view of Santa Sophia shows a low dome in the centre of the mass which gives definite expression to the vast area it covers. This dome is often compared with those of St. Peter's, Rome,



Fig. 7. SANTA SOPHIA, WESTERN GALLERY.

Photo: Berggren.

or St. Paul's, London, in which, to gain increased external effect, the outer shell is raised to the extent required to obtain the desired expression, while an inner dome, entirely separate from the outer, is designed to give the effect desired when seen from the interior of the edifice. When such Renaissance domes are viewed from the interior, the spectator requires to place himself almost directly under the dome in order to see it properly. But a Byzantine dome, erected in the sixth century, had apparently to fulfil two conditions. Firstly, it must be a true roof, for all Byzantine domes are solid, and roofed directly by the covering material. Secondly, the crown of the dome must be kept low, in order that the figure of the Pantocrator may be seen directly the worshipper enters the church. The dome of Santa Sophia entirely fulfils these two conditions, and, to anyone conversant with Byzantine work of the culminating period of the style, cannot but appear to be in entire harmony with the whole building,



Fig. 8. SANTA SOPHIA, FROM THE WEST.

Photo: Schall.

both externally and internally. Its silvery grey lead covering has also a distinct attraction and beauty of its own. Some authorities say that a large cross stood at the summit of the dome in Byzantine times.

When the Turks converted Santa Sophia into their chief mosque in Constantinople they apparently felt the need of some feature which would give an aspiring tendency to the huge mass externally, and as this could not be given by means of a high central dome, they erected four beautiful tall minarets, one at each corner—firstly, the one at the south-east; secondly, the one at the north-east; and, lastly, the two at the western corners—and, in doing so, they supplied the one thing necessary for the completion of the external design in so far as its general composition was concerned. About where these minarets are there formerly were ascents or staircases to the galleries; it is not, however, known how high the towers containing them were carried, but in the tower of Santa Sophia, Salonica, there still exists a genuine Byzantine staircase tower, and perhaps those at Santa Sophia, Constantinople, may have been of a somewhat similar nature both as regards height and design.

Another part of Santa Sophia standing out prominently in any view of the exterior in which the north or south elevations are seen, is the great arch spanning the space between the buttresses, its broad soffit at all times causing a deep shadow which is very effective. The buttresses themselves are prominent features on which is distinctly seen the striped appearance given to the exterior of the church by Fossati, the Italian architect, who restored the church in 1847-9. The walls are covered by a coating of lime-mortar similar to rough-cast. The object of this covering is apparently to preserve the masonry, chiefly brickwork, which it hides, for although the weather may act upon and in course of time disintegrate the coating, yet it is easily renewed. It is this covering which Fossati painted with red and yellow bands to represent the layers of stone and brickwork generally employed in the erection of Byzantine buildings, but the paint has now become so toned down that it is no longer offensive as it formerly was.

Around the exterior are grouped many other minor buildings. There is the square-domed building just outside the south porch which is generally accepted as having been the Baptistery of the church, but is now a Turbeh or Turkish mausoleum. It is octagonal internally, but exedras in the corners give squareness to the plan. There are fully-formed pendentives between its dome and substructure. At the north-east corner of the church there is a circular building, the use of which has not been definitely determined, but it was probably erected and used as a sacristy after the beginning of the fourteenth century. At the south-east corner of the church there is a porch of mediæval date with Byzantine columns re-used. Two of these columns have mutilated capitals of the "bird-and-basket" type, having a representation of a basket on the lower portion, and two birds resting on the rim of the basket with a cross between them just under the abacus on each face. Besides other remains of Byzantine and mediæval date there are four Turkish mausolea which, though beautiful in themselves, are out of place where they are.

The greatness of Santa Sophia as an architectural conception is shown by the fact that despite all it has passed through and to its being now devoted to the service of Islam, yet, nevertheless, it stands supreme over its misfortunes and still remains the most admired of all church interiors. The praises of the interior of Santa Sophia have been so often deservedly sung by many writers from the time of Chaucer, who wrote "So fair a church hath Venice none," to that of Fergusson, our great architectural historian, who wrote: internally it "is the most perfect and most beautiful church which has yet been erected by any Christian people," that the author can only continue the meed of praise by summing up his own impression in one sentence: "It is all glorious within—the perfect embodiment of a Christian church."

THE HORIZONTAL CURVES OF ST. JOHN'S, AT CHESTER.

By WM. H. GOODYEAR, M.A., Curator of Fine Arts, Brooklyn Museum, New York,

Honorary Member of the Royal Academies of Milan and Venice, and of the Architectural Associations of Rome and Edinburgh;
Corresponding Member of the American Institute of Architects.

IN 1904 Mr. Arthur Hill, B.E., M.R.I.A., F.R.I.B.A., published in *The Architect** a short account of architectural refinements in St. John's Church, at Chester. Mr. Hill's appointment as Lecturer on Architecture in University College, at Cork, and his degree of Bachelor of Engineering may be mentioned as among the considerations which entitle his opinions on questions of architectural construction to respectful attention. Mr. Hill announced the following arrangements in St. John's as being constructive, viz.: that the piers under the crossing lean back considerably (the so-called widening refinement) and that "the nave columns hang outward a maximum of $3\frac{1}{2}$ inches, giving a horizontal curve on the triforium level." The rest of the article was devoted to his reasons for considering the outward overhang of the piers which produce the curvature as being constructive; aside from the fact, which is matter of common information, that the church was never vaulted. Thus the stock objection as to vaulting thrust cannot apply here.

Mr. Hill also mentions that the mason's error in spacing of the bays is only an inch ("1 inch difference in width of arches"), as showing the competence of the builders, and adds, as regards the piers, that "If the foundations gave way it is rather extraordinary that they yielded so uniformly that the north and south sides have exactly the same quantity, $3\frac{1}{2}$ inches. Besides, the bases are 1 inch out of level, which might account for an overhang of about 2 inches (5 feet 3 inches diameter to 11 feet 4 inches in height). What about the other $1\frac{1}{2}$ inch? The masonry could not be dislocated to that extent without its being very evident."

Mr. Hill then quotes Sherborne Minster for horizontal curvature on the south side (against the thrust of the aisle vaulting), and finally alludes to the possibility that systematic observations in the United Kingdom, similar to those which have been made in Italy and Northern France on behalf of the Brooklyn Institute Museum, might be equally productive of important results.

It is the purpose of this Paper to corroborate Mr. Hill's views as to the curvature and leaning piers, and to supplement his measurements by others which give additional force to his announcements and to his arguments. For instance, the piers of St. John's are not only arranged in graduated inclinations of

equal amount at corresponding points, on both sides of the church, so as to produce the concave curvatures, but they are also actually set out in curvilinear alignment of plan on both sides of the church. By stretching a line, which touched the outer faces of the engaged piers in the west wall and at the crossing, the following measures were taken for the setting back of the three intervening piers on the south side of the church. The measures are quoted from west to east:

2nd pier 1 inch.	3rd pier $1\frac{1}{2}$ inches.	4th pier 1 inch.*
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On the north side of the nave the following measures were taken to the stretched line:

2nd pier $\frac{1}{2}$ inch.	3rd pier $1\frac{1}{2}$ inches.	4th pier 0'00†
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The fact may now be recalled that the original Norman church was planned for at least two additional bays at the west end.‡ Thus, if the church had been completed as planned, and presuming that the curvilinear setting out had been continued, then a line stretched along the piers would have shown deflections of greater amount, and the fourth pier on the north side, which now appears in the measures just quoted to be in line with the engaged pier at the crossing, would also be found in that case to have been planned for curvilinear alignment.

The total actual amount of curvature may be easily computed for the height of the triforium string-course. Mr. Hill mentions the inclination of the central piers as being $3\frac{1}{2}$ inches, in a height of 11 feet 4 inches. These measures are taken from above the top of the base to the necking at the capital. The height to the triforium string-course is nearly double this height, and the inclination continues at the same rate in the spandrels. The inclination up to the string-course may thus be safely estimated as at least $6\frac{1}{2}$ inches, which added to the measurements for the setting back in alignment of the central piers

* Original measurements in foot decimals: 0.08, 0.18, 0.08.

† Original measurements in foot decimals: 0.04, 0.14, 0.00.

‡ The plan published in *St. John the Baptist, Chester*, by Canon S. Cooper Scott, Vicar (Phillips and Golder, Chester), shows four additional bays as originally planned. This plan is based on a sixteenth century plan in the British Museum. The Rev. Francis Grosvener speaks of two extra bays (*Medieval Architecture of Chester*, London, 1858, F. H. and J. Parker). At all events, there was formerly an Early English west wall where the present west wall now stands, and the beginning of an arcade is still embedded in the modern west wall. The choir originally had three more bays. These were ruined by the downfall of the central tower in the sixteenth century.

would give $8\frac{1}{4}$ inches as the amount of the concave curvature on the south side of the nave, and 8 inches as the amount of curvature on the north side.*

continuation of the curvilinear system, but only by the amounts which would thus be added to the setting back in plan of the third pair of piers.



Fig. 1. ST. JOHN'S, CHESTER. Showing curve in plan, concave to the nave, at the height of the north triforium string-course. From the choir.

(Photographed for the Brooklyn Museum Surveys of Medieval Buildings.)

These figures would have been somewhat larger if the church had been extended to the west with a

* My own measures for the inclinations of the centre piers, to be presently quoted, vary slightly from Mr. Hill's. They would give about $8\frac{1}{4}$ inches curvature on the south side and about 9 inches curvature on the north side, thus figuring a variation of one inch in the curve on opposite sides of the church.

The argument for constructive curvature, aside from the setting back in alignment, may now be stated as follows. In a church without vaulting, an accidental movement of the walls and piers must have been due to settlement. Is it likely that accidental settlement of the piers and clerestory walls of

the nave would have been in lines of *curvature*? and is it likely that accident would produce curvatures on opposite sides of the nave which correspond so closely?

Mr. Hill has already given his opinion that accident did not, and could not, produce inclinations of the same amount on opposite sides of the church, and this argument may be considerably strengthened by quoting measurements for all the piers, Mr. Hill having confined his mention to the maximum inclinations. My measurements are as follows:—

own measures any special delicacy or refined scientific accuracy, the correspondences which they reveal are very remarkable, and it is probably worth while to repeat these measures in foot decimals as originally taken. One-hundredth of a foot is one-eighth of an inch, and comparisons of variation are made more easily when decimals are quoted.

THE SAME MEASURES, IN FOOT DECIMALS, AS ORIGINALLY TAKEN.

I. { 0.16	II. { 0.26	III. { 0.35	IV. { 0.17	V. { 0.05
{ 0.16	{ 0.28	{ 0.30	{ 0.19	{ 0.11



Fig. 2. ST. JOHN'S, CHESTER. The nave from the choir. Showing the concave curves in plan at the height of the triforium string-course.

(Photographed for the Brooklyn Museum Service of Medieval Buildings.)

OUTWARD INCLINATIONS OF PIERS IN ST. JOHN'S,
FROM WEST TO EAST.

North side: 2 inches. 3½ inches. 4½ inches. 2½ inches. ½ inch.
 I. II. III. IV. V.
South side: 2 inches. 3½ inches. 3½ inches. 2½ inches. 1½ inches.

It is quite likely that Mr. Hill's measurement for the maximum inclination of the centre piers was more accurate than my own. However, my measure for the maximum inclination on the south side only varies from his by ½ inch. Without claiming for my

It will be noticed that out of ten piers, the highest variation in any one pair is 0.05, or ½ of an inch. This variation occurs with III. and V. Two pairs of measures only vary by 0.02, or ¼ inch, viz., II. and IV. One pair of measures shows exact correspondence, and the remark made in footnote may be repeated here, that these piers have been in contact with the west wall ever since the Norman period, and they must have been exempt from outward accidental movement since that date. Their inclinations, which are 0.16, or 2 inches on each side, are what we should expect them to be if the nave had been planned for two additional bays, as supposed by Grosvenor.

* The west wall is built against these piers. This wall, in original construction, is as old as the Norman period and these piers could not have given way since that time.

† Half-piers, engaged in the crossing piers.

The full strength of Mr. Hill's case for constructive curvature at Chester has yet to be stated. Within a short time after beginning these recent observations it appeared to me that the piers of the nave had a *westward* inclination as well as the outward inclination; that is, an inclination in a longitudinal direction as regards the clerestory walls which they support. The current theory being that the clerestory walls of St. John's have moved outward, it appeared strange that the piers under these walls should have moved lengthwise, so to speak, as well as sideways. The

but they are wholly inconsiderable when we remember that a mason's error of three or four inches is frequently found in churches which have much finer masonry than that of St. John's. An inch is not much in variations of inclination which relate to a height of 11 feet, and in this series of measures there is only one variation which exceeds the variation of 0.08 foot, or 1 inch, at III. There is a variation of over 2 inches at IV., but the important fact remains that every pier in the nave has a westward inclination when sighted or plumbed from east to west. Of course,



Fig. 3. ST. JOHN'S, CHESTER. The nave, from the west end. Showing inclinations of the piers and concave curves in plan in the triforium string-course.

(Photographed for the Brooklyn Museum Surveys of Medieval Buildings.)

suspensions awakened by the eye, always an unsafe guide, were corroborated by plumbing, with astonishing results. All the nave piers lean west, as well as north or south, with inclination as follows, according to my measurements:—

WESTWARD INCLINATIONS OF THE PIERS IN ST. JOHN'S, IN FOOT DECIMALS, FROM WEST TO EAST.					
North side	* I. { 0.11	II. { 0.04	III. { 0.12	IV. { 0.08	V. { 0.02
South side	* I. { 0.09	II. { 0.08	III. { 0.20	IV. { 0.25	V. { 0.04

The variations in these measurements are greater than in the case of the north and south inclinations,

* Attached to the west wall since the Norman period. The implications against westward movement are obvious.

what happens at Chester is that all the inclinations are really diagonal to the line of the clerestory wall. Strictly speaking, no pier can lean north and west at the same time; it really leans north-west, of course. However, I am presenting the facts as they first became known to me, and I now bring to the support of Mr. Hill's contention that the curves at Chester are constructive, the fact that all the pier inclinations are diagonal in direction, both to the longitudinal direction and to the outward inclination of the clerestory walls. The clerestory walls lean north or south, while the piers lean north-west and south-west. It is apparently impossible even to imagine any

accidental movement which could produce these results. I will now quote the measures for the diagonal pier inclinations. These measures were taken as nearly as possible at a point on the side of the

in foot decimals (one-hundredth of a foot equals one-eighth of an inch).

The correspondences in these measures are marvelous. On the whole they repeat the accuracy of



Fig. 4. ST. JOHN'S, CHESTER. Showing inclinations in the southern line of piers from west to east. These inclinations increase gradually from the pier now engaged in the west wall up to the middle pier, and they decrease gradually from the middle pier up to the engaged pier at the crossing.

(Photographed for the Brooklyn Museum Surveys of Medieval Buildings.)

pier corresponding to the west outer angle of each base,

NORTH-WEST AND SOUTH-WEST INCLINATIONS OF PIERS IN ST. JOHN'S
FROM WEST TO EAST.

North side	I. { 0'17	II. { 0'24	III. { 0'30	IV. { 0'13	V. { 0'15
South side	I. { 0'14	II. { 0'24	III. { 0'23	IV. { 0'31	V. { 0'10

correspondence which appears in the measures for the north and south inclinations; although the fourth pair of piers now offers a discrepancy of 2 inches (0'16), which is due to the unusual excess of westward pitch in the south side fourth pier.* The variation

* This pier leans west 0'26 foot; an unusual amount when compared with the other westward inclinations.

in the north and south inclinations of this pair of piers is, however, only 0.02 foot, or $\frac{1}{4}$ inch.

We may now rehearse the various arguments for constructive curvature at Chester:—

(a) The alignment of the piers at the bases is curvilinear in plan.

(b) The curvatures at the triforium string-course are practically equal on opposite sides of the church.

(c) The correspondences of the north and south inclinations and of the north-west and south-west inclinations are so close as to bar the theory of accident.

the crossing and near the west end of a church, more than it is near the centre of the nave. Thus, if St. John's had ever been vaulted, a concave curvature on both sides of the church might be plausibly explained by vaulting thrust. But the explanation derived from thrust being eliminated here, we may naturally ask what light is thrown on the subject of settlement by the bases of the piers. The great amount of slope in the bases is well shown by Figs. 5 and 6 for the north and south directions. Not only is a similar slope very apparent for all the bases, as regards the westward inclinations, but the existence



Fig. 5. ST. JOHN'S, CHESTER. Base and plinth of the pier in the foreground of Fig. 4, south side. The plumb-lines show that the sides of the plinth are not inclined like the pier. The base is cut obliquely so as to correct an excess of slope in the plinth. The slope of the top surface of the base is 0.09 foot ($1\frac{1}{2}$ inch) in a plinth-width of $6\frac{1}{2}$ feet.

(Photographed for the Brocks Museum Survey of Medieval Buildings.)

(d) The lines of inclinations of the piers are all diagonal to the lines of inclination in the clerestory walls, and therefore cannot be due to a movement which affected the walls.

(e) The piers at the west end of the church were engaged in the Norman period and cannot have moved since that time.

(f) The church has never been vaulted.

A moment's attention may be given to this last consideration as connected with two photographs of the pier plinths and bases (Figs. 5 and 6). The thrust of a vaulting is obviously tied in at, and near,

of the slope in both directions has been verified by actual measurements for every base in the nave (including the engaged piers in the west wall and at the crossing). In taking these measures the modern pavement has been accepted as a true level. It does not seem worth while to publish these measures, as the general facts are sufficiently shown by the two pictures.

These two photographs make it extremely difficult to formulate any consistent theory of accidental movement. Even if the walls had been pushed or thrown over, they could never have moved the bases

of the piers into the positions which they uniformly occupy: with north and south sides always sloped downward to the west, and with east and west sides always sloped downward to the south on one side and to the north on the other (really, of course, sloped in the diagonal directions, south-west, and north-west, like the piers). Obviously, subsidence is our only possible explanation aside from construction. Now we can imagine the settlement of a wall as being due to bad foundations, but why the foundations of the separated piers should always have been bad near the south-west corner of every pier on one side, and

church. It is true that some bases have been repaired on the sides; but others have not, to any considerable extent.

A cursory inspection of the pier plinths in St. John's shows that the joints of their beds are concealed by the modern pavement and gives the impression that the absolutely conclusive proof to be derived from oblique cutting of the masonry blocks on which the leaning piers are placed cannot be offered. That proof, however, exists and appears in the quoted Figs. 5 and 6. The piers have bases which rest on the plinths, and the oblique cutting

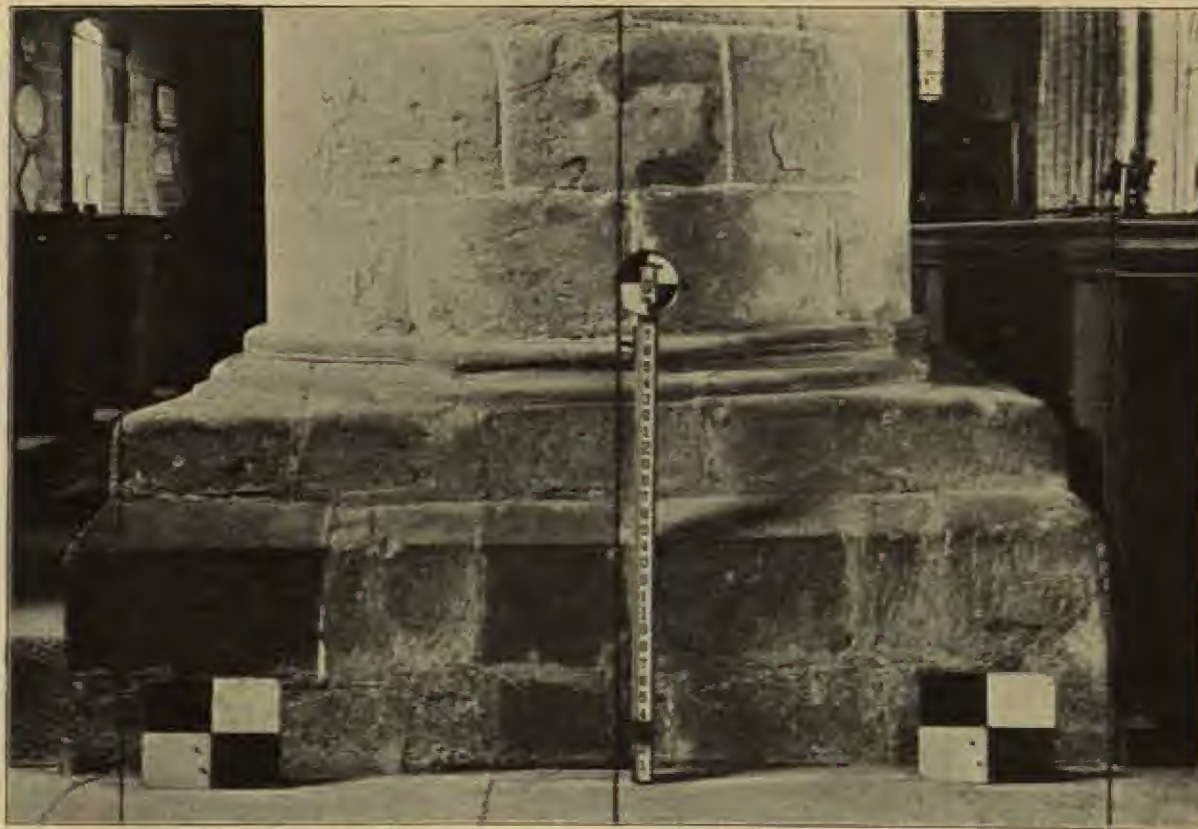


Fig. 6. ST. JOHN'S, CHESTER. Base and plinth of the pier on the north side, corresponding to the pier in the foreground of Fig. 4. The plumb-lines show that the sides of the plinth are not inclined like the pier. The base is cut obliquely so as to increase the slope of the plinth. The slope of the top surface of the base is 0'09 foot ($1\frac{1}{2}$ inch) in a plinth-width of $6\frac{1}{2}$ feet.

(Photographed for the Brooklyn Museum Service of Medieval Buildings.)

near the north-west corner of every pier on the other side, is not easy to imagine. To my intellect and to that of Mr. Hill there is only one solution. These things did not happen—they were planned.

Further and decisive corroboration of this view may be obtained from these same bases. The plumb-lines in these pictures show that the sides of the plinths are not inclined like the piers which they support. The sides of the plinths are practically perpendicular, instead of leaning to correspond to their surface slope as they would do if accident were in question. This is the rule throughout the

of these bases is visible in both photographs. The slope in Fig. 6 is partly obtained by a slope of the plinth whose bed joints cannot be inspected, but it is also partly and visibly obtained by oblique cutting of the base which rests on the plinth. This proof that the given pier is leaned by construction is absolutely decisive. The use of a compass will test the facts if they should be doubted.

Of equally convincing interest is the observation photographed in Fig. 5. Here the builder had given too great a slope to his plinth, and he has corrected this slope and diminished it by oblique cutting in the

base between the plinth and the pier. This upper base is all old masonry, and to the eye, as well as to compass test, these facts are apparent in the photograph. It gives peculiar interest to these observations to state that the downward slope *on the upper surface* of both these bases, as measured to the level pavement, is exactly the same, viz., 0.09 foot, or $1\frac{1}{8}$ inch, in a plinth width of $6\frac{1}{2}$ feet. But this equality in the rate of slope is obtained in one case (Fig. 6) by oblique cutting of the base which increases the slope of the plinth, and it is obtained in the other case (Fig. 5) by oblique cutting of the base which diminishes the slope of the plinth.

exactly the same) we find piers whose inclinations vary only $\frac{1}{4}$ inch in a height of 11 feet.

There is nothing improbable in the conclusion which is established by these observations, viz., that the curves at Chester were planned by the builders. My own observations on behalf of the Brooklyn Museum for constructive curves convex to the centre of the court, in the parapets, as well as in the cornices, of various mediæval cloisters, have been corroborated by Professor A. L. Frothingham for all the early Roman cloisters, and by my friends Mr. F. W. Deas, of Edinburgh, and Dr. H. Colley March, of Portesham (near Dorchester), for other



Fig. 7. ST. JOHN'S, CHESTER. Westward inclinations of the nave piers on the south side. From the south aisle.

(Photomounted for the Brooklyn Museum Surveys of Mediæval Buildings.)

We may easily understand that the mediæval builders found the easiest method of inclining the piers to consist in giving a general slope to the plinths without close attention to accuracy, this attention being confined to the base directly under the pier. That this was the method adopted is absolutely proved by these two pictures. The north and south inclinations of the respective piers may now again be quoted. The piers are the second piers from the west end and next the engaged piers of the west wall. The south pier (base in Fig. 5) leans south 0.28 foot. The north pier (base in Fig. 6) leans north 0.26 foot. Thus, in bases which were obviously cut in different fashion (but whose upper slope is

localities. The remarkable observations of my friend Mr. Arthur Kingsley Porter, of New York, have so multiplied the cases of cloister curves that their rather frequent existence in Italy, at least, is now placed beyond even the shadow of a doubt. I cannot say whether Professor Frothingham's observations have been limited to parapets, so as to eliminate the difficulties suggested by thrust, but this has been the case with the observations of my other friends and with my own.

As to churches, my own observations, on behalf of the Brooklyn Museum, are rather numerous. Within the sphere of these observations the most frequent arrangement of the curvature in plan, is

convex to the nave on one side and concave on the other. This is the arrangement, for instance, of San Apollinare Nuovo at Ravenna, of San Donato at Genoa, of Notre-Dame at Paris, and of the cathedrals

like the cathedral of Fiesole and S. Ouen at Rouen. Only two cases of curvature which are convex to the nave on both sides are, so far, known to our Brooklyn Museum surveys, viz., Santa Agnese at



Fig. 8. ST. JOHN'S, CHESTER. Diagonal (south-west) inclination of the south side pier next the crossing.

(Photographed for the Brooklyn Museum Surveys of Medieval Buildings.)

of Pisa and Siena. The latter is the only instance, among those quoted, where the curvature does not begin in the columnar, or pier, alignment. There are other cases of attenuated S-shaped parallel curves, beginning in the pier, or columnar, alignment,

Rome and Santa Mustiola at Chiusi. Of both sides concave to nave only two cases are, so far, known, outside of St. John's at Chester. One of these is Orvieto cathedral, which is not vaulted. If the piers are inclined in this cathedral, or curved in alignment,

the fact is not known to me. At Orvieto the curves are found in the gallery parapets and walls and from there upwards.*

The other case of curvature concave to the nave on both sides is Rheims Cathedral. Here the piers

involving curvature (of 10 inches deflection on each side) at the height of the clerestory parapets, are connected with certain peculiar arrangements of the widening refinement which begin in the spandrels and vaulting shafts at the level of the arcade capitals.*

Thus, St. John's at Chester is, at present, one of three quotable cases of curvature concave to the nave on both sides, and the only one, so far known, in which the piers were inclined at the foundations in various amounts of pitch so as to produce the curvature. It is also the only case of horizontal curvature which has, so far, been published (or observed, to my knowledge, with proofs of purposed construction) for the United Kingdom.

Mr. Hill has already been quoted for the point that the crossing piers "lean back considerably." I have retested this fact, both by actual plumbs and by photographs with plumb-lines inside the camera. Fig. 9 offers the best illustration for the crossing piers on account of the larger dimensions of the detail. The inclinations, which are very delicate, are also fairly well shown by Fig. 2. My reasons for agreeing with Mr. Hill in considering the inclinations of the crossing piers to be constructive, are the absence of vaulting thrust, the great resistance offered by the transept walls, the fact that the inclinations are in straight lines, and that they are too uniform to have been produced by accident (see Fig. 2). By plumbs taken with a line of 11 feet on the western crossing piers (0.13 foot to a side) and figuring this rate for the given height of about 24 feet, the inclinations appear to be about 0.30 foot or 3½ inches to a side. The tower which originally surmounted the crossing and which fell in the sixteenth century towards the south-east without damaging the piers, was supported on walls which rose 10 feet higher than the very considerable wall still visible above the crossing arches as seen in Fig. 3. This tower must also have served to steady the crossing piers.

Outside of St. Mary's, at Dover, where the widening refinement has been observed by Mr. G. A. T. Middleton,† Mr. Hill's observation is the first one ever published for the widening refinement in England. I have recently made a publication for this refinement in St. Patrick's at Dublin,‡ and must



Fig. 9. ST. JOHN'S, CHESTER. Widening refinement of the north-west crossing pier. Compare No. 2 for the corresponding inclination of the south-west crossing pier.

(Photographed for the Brooklyn Museum, *Surveys of Medieval Buildings*.)

are perfectly aligned and absolutely perpendicular up to the capitals of the arcades. The arrangements

* Photographs of the Orvieto curves were made under my direction for the Brooklyn Museum in 1895, and have been enlarged, but the photographs have never been published. The facts were published in the *Architectural Record Magazine*, Vol. VI., No. 4, 1897.

* I have been in the habit of considering the curves at Rheims as resulting simply from these peculiar arrangements of the widening refinement and not as having been independently planned. I may be wrong about it, but this is the explanation offered in the *American Architect* of 16th March, 1910.

† R.I.B.A. JOURNAL, 25th Jan., 1908.

‡ Irish Builder, 6th June, 1914.

refer to this article for further information about this refinement in general.*

The use of the widening refinement in the crossing piers of St. John's leads to the question as to what may have been the purpose of the westward inclination of the piers in the nave. I have insisted on the point that the inclinations are really diagonal, but the optical effect of leaning the piers westward is to increase the effect of outward widening as regards the view towards the choir. Thus, piers leaned westward, which had no north and south inclination, would appear to the eye to lean north and south when the spectator is looking toward the choir. The purpose may therefore have been to increase the spacious effect of the upper nave, in which case the view toward the choir must have been considered as the most important. If St. John's had originally a pavement sloping upward toward the choir, which cannot now be ascertained, but which is the case in many mediæval churches, we might suppose that the piers were inclined backwards as so to make their vertical lines normal to the pavement and so conceal the existence of the slope. The piers of Notre-Dame at Paris are sloped westward; so are those of St. Mark's at Venice, and one other Venetian church can be quoted for the same arrangement.

There are still some things which must be said about St. John's at Chester. For instance, the iron tie-rods which appear in the views of the nave are reminders of dangers apprehended, if not really existent, and they are also reminders of the apprehensions which will always prevail as to many other churches, until the widening refinement and other refinements are generally known to have been a part of the ordinary mediæval practice. Between the years 1859 and 1864, St. John's was subjected to various repairs which were carried out by Mr. R. C. Hussey, a London architect. One of these so-called repairs was the removal of the solid upper clerestory walls for the height of about 10 feet. The lower clerestory walls had been steadied by this uniform upper weight and needed that weighting, because the open-work of the beautiful double triforium galleries results in an inequality of weight on the outer side of the triforium walls. Thus, when the upper solid wall was removed the walls tended to become top-heavy on the outer side. This tendency was increased by the outside "restoration" which tacked on a heavily projected arcading, a heavy cornice, and a still heavier outside foot-ramp,

about a foot wide, under the arcades, to a wall which had been originally quite flat. Then, and not till then, all the roofs were removed; and then, and not till then, indications of a movement in the walls were observed (so it is said) which led to the hasty employment of the tie-rods. How far pure apprehension, rather than real danger, was the cause of putting in the tie-rods, cannot be said. It may easily be believed, and is certainly the case, that the old leaning construction was held to be an accident (as it still is by the world at large) and that the apprehensions of danger, however justified at the time by the results of unwise changes in the construction, were much increased by the existence of the old inclinations. *This constructive inclination may also have been a contributory cause of danger*, after the steadying weight of the upper wall had been removed from above the arcading of the clerestory, after the outer clerestory wall had been overweighted by the outside additions, and after the resistance of the aisle roofs had been removed.

The outer wall of the aisle on the south side was wholly rebuilt between 1859 and 1864. The outer wall of the north aisle was refaced on the exterior side at a much later date. The inner side of this wall is old masonry and has an outward inclination of about 7 inches in about 26 feet. It may be that this parallel inclination was designed to avoid the contrast of perpendiculars adjacent to the inclined piers and the consequently over-conspicuous character of the pier inclinations which would result from that contrast. The pier inclinations are now quite conspicuous on the south side of the church on account of the contrast with the perpendiculars of the new side door, and new side windows of the south outer wall, and perhaps on account of the contrast with the perpendicular side wall. There are many instances of the subtle evasion of these contrasts in Continental churches, and it may be that they were formerly avoided at Chester and that the leaning north inner wall is a solitary remnant of the old method. However this may be, it is time to bring this paper to a close, but I am loth to do this without once more pointing out that the constructive inclination of the piers in St. John's at Chester is demonstrated for the bases of two of the piers beyond any debate, and that this constructive inclination was a means of obtaining the constructive curvature.*

* Or to the *American Architect* of 10th March, 1910. See also the R.I.B.A. JOURNAL for 9th Nov., 1907.

* None of the bases in St. John's are accessible to photography excepting those shown by Figs. 5 and 6. Observations are also more difficult as to masonry details in other cases on account of closely adjacent and surrounding pews or on account of repairs.

REVIEWS.

ANCIENT TOWN PLANNING.

Ancient Town Planning. By Professor F. Haverfield. 80. Oxford, 1913. Price 6s. Oxford: University Press.

Professor Haverfield's treatise on Ancient Town Planning contains in its 150 pages a large body of accurate and well-digested information on the historical aspects of one of the "subjects of the day." The word "accurate" should be emphasised, for the author, in the fashion he has taught us to expect from him, substitutes a clear and dispassionate review of actual evidence for the vague and general statements which too often pass muster on a subject of the kind. The reader of Professor Haverfield's book, for example, will be put in possession of what is actually known about ancient Babylon and ancient Alexandria, themes on which hazy notions prevail, and will be duly warned against assuming that wherever in a modern city four streets meet in a "Carfax" a Roman plan underlies the arrangement. Professor Haverfield is, as one knows, severely sceptical as to the extent of Roman survivals in the cities of our own land, and he even rejects, though without reviewing the evidence, the vindication by Mr. Bellows of an exact Roman survival in the main streets of Gloucester. There can be no doubt, however, that these crossings at right angles of main streets in modern cities that were once Roman do in the main represent the original arrangement, as the author himself shows in the case of Lincoln; and in connection with this may be noted the curious fact of the disappearance in our once Roman cities of the open space or forum near the crossing, which must have been of very great practical convenience. For want of this, modern Gloucester is in its central part very inconvenient in its planning, as the traffic is congested at the intersection of the four streets. It is interesting to note that, according to M. Blanchet's *Enceintes Romaines de la Gaule*, the "Place" at Rouen opposite the Cathedral is the forum of the Roman city.

On this question of the rectangular plan the reader will find full information as to its history in old Oriental, Classical Greek, Hellenistic, Roman, and mediæval times. Kahun, in Egypt, dating about 2500 B.C., is held to be the earliest extant example of such an arrangement, but we may find it represented a good deal earlier in the old Egyptian cemetery opposite Cairo, of which the central features are the three great pyramids. The reproduction in funereal dispositions of the arrangements of life upon earth is an established principle from the most primeval times, and in the Ghizeli cemetery, where the private mastaba tombs are ranged in straight lines westwards from the royal mausolea, we can see the quarters of the nobles disposed on the rectangular scheme under the shadow of the imposing domicile of the king. The introduction of this Oriental system of town-planning into the West is the most important moment in the whole history of the art, and is connected with the

names of Hippodamus of Miletus and of Pericles, under whose auspices the former laid out the Piræus, the port of Athens. Hippodamus, about whom Professor Haverfield might have said a little more, seems to have been a social philosopher much interested in the proper ordering of human communities. He conceived the idea, which has presented itself to other sociologists since his time, that physical environment may be made to play a considerable part in the moral education of man in the aggregate. The present genial President of the Board of Trade expressed this idea in a humorous way a few years ago when, in pleading for new palatial quarters for the London County Council, he explained the tortuous methods of certain Government departments by the fact that their officials had to worm their way through their business in the rabbit-warrens of old and much-altered houses! Inspired by some notion of this kind, Hippodamus of Miletus worked out the theory that straight and regular streets would inspire citizens with the spirit of rectitude and order, and he proceeded to introduce to the Greek world of his day the Oriental scheme of rectangular planning, with which as an Asiatic Greek he would necessarily be familiar. We are reminded here of the political and ethic aims of Napoleon III. when in our own time he straightened out Old Paris.

The first attempt to carry out this educative aim in a European community was somewhat unfortunate, and is a warning rather than an ensample. The laying out of the Piræus was really a case of doctrinaire town-planning, where a ready-made paper scheme is imposed upon a site the natural features of which suggest another and a more varied method of treatment. The Piræus, with its promontory of indented outline and bold elevations, lends itself naturally to that more picturesque treatment suitable for the maritime sites round the broken Mediterranean coasts. The imposition of the straight streets and right angles upon such a varied and hilly locality was rather pedantic and savoured too much of the pedagogue. It is possible that Aristophanes was having a hit at doctrinaire town-planning when in his *Birds* he described his City of the Birds in the air, "Cloud-Cuckoo-Town," as designed by Meton, the astronomer, on the radiating plan, with a market-place in the centre and straight streets leading from it in every direction, like the rays of the sun. It is interesting at any rate to note that the radiating scheme had presented itself as a possible one to the mind of the Greeks at the same epoch at which the rectangular scheme had been introduced by Hippodamus. The radiating scheme plays a comparatively small part in town-planning history and is on the whole modern and artificial. The district round the Arc de Triomphe at Paris is a classic example. Strictly carried out, as in this instance, the scheme is open to grave objections, but in a modified form, freely and rationally employed, it may be of great use, and it appears in Wren's famous scheme for the rebuilding of London after the Great

Fire, as well as in several excellent modern plans. The radiating scheme is in one sense a natural one, for it must necessarily present itself in the case of any city that is the centre of a district, and from the gates of which roads branch off to all the points of the compass. Such roads, if continued within the walls, would converge to a central point and would inevitably produce a radiating plan in the urban streets. The city Rome on the Peutingerian map of the Roman Empire is represented as a circle toward the circumference of which the roads converge from every direction, but they stop short at the ring wall which marks the city. As a fact, of course, in the case of most towns, their plan was fixed or constituted itself prior to any great development of the means of external communication, and this radiation was not allowed for. The danger of doctrinaire town-planning is only one of the lessons to be derived from a historical study of this subject that may be of practical service to the town-planner of to-day. Another lesson of equal value may be evolved from historical examples, and this is the danger of drawing out a plan for a district as if it were to be final, and not allowing for extensions, which in the normal state of things are inevitable. Craig's famous plan for the New Town of Edinburgh is a case in point. He ended his central broad thoroughfare, now George Street, at each termination with a square and a church, as if nothing were ever to be added on, and the result is that at the western extremity of Craig's scheme there is awkward congestion.

In many ways the practical layer-out of cities may derive hints from the facts about older times that are set forth with such lucidity and thoroughness in Professor Haverfield's volume. To the intelligent traveller also the book will be very welcome from the light it throws on the growth of ancient towns with the existing aspects of which he is familiar. Of Constantinople nothing is said, but that would probably require a book to itself. Of ancient Alexandria the plan seems almost hopelessly lost, though the map of the site made by Napoleon's engineers about 1800, when there was no modern city upon it, might be expected to furnish authentic evidence. This the author does not notice. About Pompeii he gives some very interesting information. Against the theory that it was all laid out at once in a single scheme he opposes one that recognises the signs of a gradual growth from "a little Oscan town planted in what became its south-western corner," east of the present Forum, and near the older "Forum Triangulare," where stood the Doric temple, by far the oldest Pompeian building. "Round this primitive city grew up," by successive accretions, "the greater Pompeii," only half the site of which, the author points out, has yet been excavated. There are interesting notices about Turin, Milan, Florence, Naples, and other well-known Italian cities, as well as about others in the north such as Cologne, and some of our own towns of Roman origin. Altogether Professor Haverfield's compact little volume is one that

the traveller would do well to take with him on his Continental excursions.

G. BALDWIN BROWN [*Hon. A.*].

REGISTRATION BY CHARTER.

The Council's Proposals: Discussion at the Adjourned Special General Meeting, 29th June.

The debate adjourned from the Special General Meeting of the 8th June [*JOURNAL*, 13th June, p. 515] on the Council's proposals for a new Charter and By-laws empowering the Institute to constitute and maintain a Register of persons qualified to practise as architects, was resumed on Monday, 29th June. The meeting was probably the largest and most representative that has ever taken place at the Royal Institute. Nearly 300 members were present, and of these seventeen were from the provinces, including eleven Presidents or Past Presidents of Allied Societies. The proposals were published in the *JOURNAL* of the 9th May. At the meeting of the 8th June Clauses 8 and 9 were referred back to the Council for further consideration, and an amendment by Mr. Sydney Perks on Clause 10 was under discussion at the moment of adjournment.

The PRESIDENT, Mr. REGINALD BLOMFIELD, R.A., in opening the debate on the 29th June mentioned that the discussion on this matter had begun last December and that five Meetings had been devoted to it.* They were still discussing it on this the last Meeting of the Session, and he hoped that before they separated they would have come to some conclusion.

Discussion was then resumed of Clause 10, and of Mr. Sydney Perks' amendment—viz.:

"That Clause 10 be referred back to the Council for further consideration, a revised clause to be submitted to the General Body at an early date—it being distinctly understood that the Members of Allied Societies are not to have larger representation on our Council than our own Associates."

MR. WM. WOODWARD [*F.*]: I rise to express the hope that this amendment will not be passed. Mr. Perks, in his speech at the last meeting, very properly passed a eulogium upon the Allied Societies—a eulogium which, in my opinion, was well deserved—and that eulogium was sanctioned and endorsed by Mr. Edwin T. Hall, who followed Mr. Perks. But immediately after passing that eulogium, Mr. Perks proceeded to demolish the golden image which he himself had set up. Let us consider for a moment these Allied Societies, and what they are. I have been a member of the Council of the Royal Institute for three years, and have had opportunities of witnessing the value of the representatives of those societies.

* The Report and Recommendations of the Council on the subject of the Statutory Registration of Architects [*JOURNAL*, 6th December 1913, pp. 80-92] were submitted for the consideration of the General Body and discussed at Special General Meetings held on the 1st December 1913 and 5th January 1914 [*JOURNAL*, 6th December 1913 and 17th January 1914]. At the latter meeting, when 180 members were present, it was unanimously resolved, on the motion of Sir Aston Webb, R.A., "that the Council be authorised to prepare, and to submit for the approval of the General Body, a Petition for presentation to the King, praying His Majesty to grant a new Charter containing such further privileges and powers as are required to promote effectively the advancement of Architecture by enabling the Royal Institute of British Architects to register and to distinguish persons qualified to practise." As a step towards giving effect to this Resolution the Council brought forward the proposals for registration by Charter which were discussed at the Meetings of the 27th April, 8th June, and 29th June.

They have done excellent work. Their criticisms on the work of the Council and of the Institute have been most valuable, particularly from the point of view of the large body of provincial members. The Allied Societies total 28—19 in the United Kingdom, three in South Africa, four in Australia, one in New Zealand, and one in Canada. For the purposes of this amendment we may confine ourselves—and I think Mr. Perks will be with me in this—to the 19 societies in the United Kingdom. On the face of it, Mr. Perks's amendment would appear, unless one goes more closely into its practical working, to be a reasonable thing. But Mr. Perks has not brought before this meeting one concrete amendment such as we could deal with in a practical manner. Supposing it is admitted that the Allied Societies should not have a greater representation than the Associates, how does Mr. Perks propose to apportion the equality of votes between those 19 Allied Societies, giving equal representation to the Associates, who we have agreed shall have 10 seats on this new body? Mr. Perks, surely, cannot suggest that certain of these societies are not worthy to be represented on this body. Does he suggest that there should be an amalgamation of some of these societies? And if so, which of them should be allied to others? Has he the opinions of the Allied Societies respectively as to whether or not they individually would care to be allied to other societies? Those are the concrete points which Mr. Perks should have been prepared with when he moved this amendment. It is of no use moving general amendments of this sort; they must be specific. Therefore I say that the Allied Societies are entitled to the degree of representation which we have suggested for them on this new body. What ground is there for the apprehension which seems to be in Mr. Perks's mind that these 19 representatives will combine for the purpose of upsetting or thwarting the interests of the Royal Institute? [Mr. Perks: I never suggested it.] There is no ground for it. If you wish to know the work of the Allied Societies I would refer members to pages 291 to 412 of the Institute KALENDAR. You will find there the foundation for what I state to be a fact, that there is no ground for apprehending that these Allied Societies, if we give them the power set forth here, will use it for the purpose of thwarting the Council or the interests of the Institute itself. Therefore I trust that, in their decision to-night, members will relegate this amendment to the position it deserves, and that they will recognise the position which the Allied Societies are entitled to in the new body, and which I am sure they will be the last to abuse.

MR. G. HASTWELL GRAYSON [F.], Ex-President of the Liverpool Architectural Society: I had the opportunity of saying a few words in this room a month ago, and then I was speaking on my own behalf. But since then I have had communications from eight or ten of the Allied Societies, and have had opportunities of discussing things very fully with many of the leading men in the provinces, some of whom are here to-day. I have had a good deal of correspondence also. It was evident a month ago that some 120 or 130 Associates in this room thought that the Allied Societies had too great a representation on the Council already. There are in the Allied Societies 1,942 members. They are not all members of the Institute. There are 298 Fellows, 337 Associates, 438 Licentiates, and 869 who are not members of the Institute. The Allied Societies are competent and entitled to represent those of their members who are outside as well as those inside the Institute. It may not be known here, but the Allied Societies do a vast amount of what I call "police work" for the Institute. We are in control of all our members; we deal with a large body of practitioners who are very important to architecture in this country, but whom the Institute are unable to touch. We do very valuable service, and we feel we are entitled to some reward. And the reward we ask is that we should have, if not every Allied Society represented on the Council, at any rate the representation which the Council have offered us. We thought when they said that only those societies which had fifty on the Register were entitled to representation, that we were being treated very badly; we thought we were entitled to a greater representation than that. The speech of Mr. Perks has been very carefully read by provincial members, and we feel we

are being treated in a way that we have no right to be treated. We were asked to become allied to the Institute; and we have altered our rules, and done everything we could to fall into line with the Institute, and to have it thrown in our teeth that we are of no greater service than the Associates is, we feel, an insult; and we trust this meeting will allow, if not complete representation, at least the representation suggested by the Council.

MR. A. E. MURRAY, R.H.A. [F.]: I represent the Royal Institute of the Architects of Ireland. We claim to be only two years younger than the R.I.B.A.; therefore, we think we are in some position. We have always loyally supported this Institute; we have always felt that it is the parent Institute and that in supporting it we were supporting the profession at large. We feel that this Institute is, or ought to be, the mouth-piece of the profession in the United Kingdom. I am strongly of opinion that this Institute holding the position it does, and remembering the distinguished men who have been Presidents and worked on the Council and given their whole-hearted attention to the details of its working, it ought to get our loyal support. I think the more the Allied Societies are in touch with this Institute, and support the very honest endeavours it makes for the profession, the better for the Allied Societies. I think, too, that our Royal Institute of Ireland has rights even above the other Allied Societies. You gentlemen who belong to the provincial societies in England and Scotland have the Institute near enough to you to get into a train and come here and give your opinion. But we in Ireland have not only to get into a train—and we are a poor country, it means expense to come over here, and takes some days to do it—but we have to get into a boat as well, and then into another train. I would be glad to see those representatives of the Allied Societies come here and learn personally what is being done for the Allied Societies. Mr. Woodward said there was some fear, but I think there is nothing to fear. It is like the case of the old lady on board ship in a storm who went to the Captain and asked, "Captain, is there any fear of danger?" "Yes, ma'am," was the reply; "there is a lot of fear, but there is no danger!"

MR. J. B. MITCHELL-WITHERS [F.], Past President of the Sheffield Society of Architects: I would like to call attention to one point. There seems to be an opinion that members of the Council who come from the provincial societies do not represent the Associates. That is a great mistake. Members who are elected Presidents of the Allied Societies do represent the provincial Associates; and it is a mistake to suppose that they are, in any way, not elected by the provincial Associates as their representatives here in London. I think, too, it will be a great pity if liberty is not given for those societies to send Associate representatives to the Council, because in many cases the questions which the Council have to deal with in London are such that they extend over a much wider area than the Metropolis. The rule that the representative must be a Fellow is the reason why many of the Allied Societies have no representative at all on the Council this year. In my case I was an Associate, and had no intention of becoming a Fellow, because I was not in sympathy with the way in which some of the Fellows used to be elected here. But knowing that I was to have the honour of election as President of the Sheffield Society—the first society which was ever allied to the Institute—I thought it would not be fair on my part not to take the Fellowship in the proper course, and therefore I applied for election. If I had taken any other course, it would have meant I should have had to be put up as an Associate Member of the Council, and if elected taken the place of some other Associate. I thought that coming from the provinces, and being elected in a large measure by the votes of the Associates, I was doing no wrong to the Associates in taking that course. I should like to bring to your notice, too, that in the past in the provinces we have had men of very great capacity who have stood apart from the Institute, and whose services on the Council would have been a great acquisition. It would have been a great advantage if you could have had those men on the Council when considering earlier Charters, and it will be good for you to draw from a wider area than you do at present, in order to get fuller support from the provincial societies. But

the main object of my rising is to bring to your notice the point that provincial Presidents represent the Associates in the Provinces as well as other members, and I hope I have made my point clear.

MR. GILBERT FRASER [A.], President of the Liverpool Architectural Society: I should like to say, in reference to this matter, that the Allied Societies are very united indeed, and I hold here letters from nearly all the Allied Societies who are in sympathy with us in this matter, and some of them have sent representatives here to-night.

MR. J. A. GORCH, F.S.A. [F.], President of the Northamptonshire Association of Architects: I should like to present myself, if I may, in a dual capacity: as President of an Allied Society—a small one, but one which I hope is worthy of consideration, namely, Northamptonshire; and also in the capacity of practically the father of the Council of this Institute. As a matter of fact, with the exception of two years when the chances of a popular election were adverse, I have been on the Council for twenty-seven years. That may or may not be held to be a recommendation. On the one hand I may be regarded as an effete old fogey, and on the other hand I may be credited with having acquired an accumulated experience. Throughout the whole of the period I have served on the Council it has always struck me, but I am bound to say less in recent years, that the Council was practically a metropolitan body. They seemed to me to have no knowledge of and no sympathy with certain of the customs which obtain in the provinces, more particularly with regard to the question of taking out quantities and payment for quantities. The customs which prevail in the part of the country in which I practise were absolutely unknown to them, and they had no notion of the practices which do prevail and which work out very well. So it has always been borne in upon me that the Council of the Institute has been too metropolitan in character. For that reason I have for a number of years advocated an extension of the representation of the provinces on the Council. And the idea that this matter was suddenly sprung upon the Council and decided in five minutes is quite misleading. It has been before the Council more or less in concrete form for several years, and finally, after long striving, the Council have begun to take what I call a more cosmopolitan view. And especially in view of the extension of the privileges of architects which is now contemplated it is important that the Council should be widely representative. Difficulties have been suggested—Mr. Perks, I believe, suggested it might happen that a Society with only one member of the Institute might still send its President here as a representative. That reminds me of the story of the very polite gentleman who called at a house, and when the maid opened the door he said "Might Mr. Smith live here?" "Yes, sir, he might; but he don't." (Laughter.) These things might happen, but they don't happen. ("Why?") Because of the law of averages and the law of chances. It is quite inconceivable in actuality that a Society with one member should be able to send its President, although theoretically it is possible. And I would also point out that geography is going to protect the Institute from being swamped by its provincial Presidents. How is it possible for the President of the Aberdeen Society, for instance, or the Glasgow Institute, or the Edinburgh Association, or the Northern Association, to be present at every meeting of the Council? It is impossible. Gentlemen in the provinces have work to do just as gentlemen in the metropolis have—possibly they have not got much, and it is frequently borne in upon us that we ought to have more—but they do have a certain amount of work, and if they come up here, especially if they come long distances, they are obliged to neglect for the time being the work they have in hand. That point was made by Mr. Paterson at the last meeting. It is a costly thing, and there are a good many out-of-pocket expenses in connection with the visit. I am perfectly certain that the Presidents of the Allied Societies will never assemble in such numbers as to swamp the Institute. Their numbers prevent it at the outset; there are only nineteen out of fifty, and I am prepared, as President of one of these Allied Societies, one of the smallest—I am prepared,

if it would ease matters in the slightest degree, to eliminate that part of the suggestion which gives to the smaller societies a representation in rotation. But that is a very minor point, and I attach no importance to it personally. But what I do attach importance to is that these large and powerful societies who represent the provinces generally should have a direct voice upon the Council. It is a mere mockery to say that they can vote for London representatives, because the whole point of my observations during the twenty-seven years that I have been upon the Council is that the London man is out of sympathy, largely from unavoidable ignorance. I say he is out of sympathy—or, at any rate, if he is not out of sympathy, he has not that keen sympathy with the provincial methods that he should have. So I appeal most seriously to the Institute to take this opportunity of widening its sphere of influence and getting into its Council the Presidents who will bring vital and local knowledge into its councils.

MR. R. BURNS DICK [F.], President of the Northern Architectural Association: This is the first occasion I have had the privilege of speaking to a meeting in this room, and I do so with considerable diffidence. I have come here from Newcastle to-day solely for the purpose of supporting this clause, and as there appears to be considerable opposition to the proposed increase of representatives of Allied Societies, I feel it is my duty to say something on the question. It seems to me that the arguments which have been used against this increase might just as well, in fact might more logically, have been used in favour. It is contended that because about two-thirds of the members of Allied Societies are not members of the Institute that it is not fair, that it is an injustice, that they should be represented on the Council. Surely the Institute is not willing that there should be such a large number of practising architects in the provinces who are not connected with the Institute. What is the cause? Mr. Perks said he had nothing but praise for the Allied Societies; he thought it was a great advantage to the Institute that they should be in constant touch, and that they should receive encouragement from the Institute. But this touch with the Institute hardly exists; the Institute is not a live thing at all in the provinces at the present time, and that is because of the lack of adequate representation. And if by increasing this you can get these members of Allied Societies to understand that there is a real communion of thought and of work with the Institute you will get them to join the Institute. And it cannot be said that these men are unworthy; I know a great proportion of them are worthy of being members of the Institute, and that they have the qualifications; it is simply that they have not the interest in the Institute because of the lack of communication between the provinces and the central body. It was also contended—though this was not put very forcibly by Mr. Perks—that because there were only four or five hundred Licentiates out of about 1,300 who were members of Allied Societies that it would be an injustice to this class of member. The same thing holds good. The Licentiates have now got an interest in the Institute, but they have no representation. If you can show that Allied Societies are really in alliance with the Institute, then these Licentiates will see that by joining the Societies they will have some form of representation through the Presidents of those Societies. Again, a strong point was that the Associates were likely to suffer. But why should they suffer? A very large proportion of Associates are in the country, and I contend that if the Allied Societies send their Presidents they would be representing country members generally, and that the Associates would benefit by that. Another point which was dealt with was as to the lack of time given to the consideration of this clause. Proper consideration has been given to it, because Mr. Hall, who supported Mr. Perks, said that this matter had been threshed out when the former Charter was being drafted, and that it had been brought up repeatedly. Does that look like a hasty resolution? On the contrary, I think it is a logical outcome of long deliberation, and the Council have at last realised the immense importance of this matter, and have taken a very broad view which can only end in good for the Institute. There is a fear that there might be a "pocket borough" for somebody. That is no

catch, surely. There is no £400 a year here! There is nothing in connection with it but a great deal of expense and hard work for those provincial representatives who do their duty as members of the Council; and they will do it from disinterested motives—I do not think that the glory would quite compensate for it. But I think we ought to look at this from a higher standpoint. I tell you, gentlemen, that if you reject this clause you miss a very great opportunity of extending the power and the influence of the Institute throughout the country, of encouraging sounder principles in our art, of inculcating a higher ethical standard of conduct amongst the practitioners throughout the country, and of increasing the respect of the public for this Institute which would thus be able to wield such an influence. Factional and sectional interests would not suffer at all. The representatives from Allied Societies would deal with the larger issues that concern the relations between architects and the public, and problems peculiar to their respective districts, and generally the result would be a distinct benefit to the profession of architecture and to the Institute. Gentlemen, I most strongly urge approval of this clause.

MR. W. CURTIS GREEN [F.]: I am not a member of an Allied Society; I, like many others, have sat a silent spectator at these meetings, not because I do not feel the necessity of supporting the proposals formulated by the Council at the wish of the General Body to settle this matter, but because I do not understand architectural politics. I come from a place where, though we are interested in architecture and do a modest part towards furthering its interests, we have no politics. I can understand that to a mind not otherwise pre-occupied politics is a fascinating calling, and a fine one where there is conviction and purpose. But, Sir, I venture to think that architects have as much to do with politics as they have with housekeeping. If we allow ourselves to become involved in the intricacies of housekeeping we shall have no time for our work. If we allow this Institute to become a party machine we may say good-bye to architecture. We are not tradesmen, we are not trade unionists; we are not members of this Institute for what we can get out of it. This Institute exists for the promotion of architecture, and not for the promotion of the interests of architects, however young. With regard to this proposal to give greater representation to the Allied Societies, it has been said it is against the interest of Associates, and even against the interest of Fellows. If we were a trade union no doubt our own interests would come first, but the interests entrusted to us are of finer material than selfish and material interests. Our concern is with the welfare of architecture all over the country, and if we admit these men representing the smaller societies to the charmed circle of our Council I feel sure they will serve architecture all the better for being in closer touch with the ideals of this Institute, and for that reason I shall vote for the proposal, and I hope the rest of the members will do so too.

MR. F. B. DUNKERLEY [F.], President of the Manchester Society of Architects: I come here to-night representing what I believe is the strongest in numbers of your provincial societies, and I therefore claim that altruistic motives are not affected one way or the other by the resolution or the amendment. But we in Manchester have a strong feeling of sympathy with those whom I may call our weaker brethren, and we think their representation hitherto has been totally and entirely inadequate, and I believe that if the amendment which stands in Mr. Perks's name is carried it will be the most serious blow which has been dealt at the unity of architects for many years, as unity is above all things at this particular crisis most desirable. I should like, if I may, to controvert one statement which Mr. Perks made in his speech. He said that the Institute gets nothing out of these provincial societies, and they cost us about £500 a year, and £100 for the expenses of their Presidents. I think that is a most misleading way of putting things. Speaking for my own Society, we have thirty-two Fellows, sixty-five Associates, forty-two Licentiates. This Institute receives four guineas for each Fellow, and it returns us one guinea, so that it has a net gain of three guineas per Fellow. From Associates it receives two guineas and

returns half-a-guinea, a net gain of one and a half guineas. From Licentiates it takes the whole guinea. That is the contribution from members of our Society who are also members, corporate or non-corporate, of this body. The amount is £257 5s. 6d. per annum. What I want to know is what advantage do we provincials get for these contributions as compared with what you gentlemen in London get? We get, of course, very valuable assistance from the Institute in cases of unfair conditions of competition. We want to get these things put on a fairer basis. The Institute sends us assessors in our competitions, though they are not always occasions of unbounded joy! But they are not always simply local competitions; they are often open to architects in the whole of the British Isles. We get the JOURNAL, which we receive every fortnight, and that is a very valuable asset, for we are able to read the very interesting papers which we cannot hear personally, and the reports of debates, such as the one which took place on the 8th June. But for this we pay £250 a year, and I consider that that is fairly high. The bulk of this money, £250 a year, goes towards the maintenance of this building, the staff, the library, and so on. You London members get 99 hundredths of the value of this building and library; to us provincial architects it is of very little use. It is now twenty years since I passed that examination on which such enormous stress has been laid by many members, and this is only the second time that I have appeared within these sacred precincts. Personally I think undue prominence is given to these examinations; I think twenty or thirty years spent in the service of architecture is of more value than examinations. What I want to see in this Institute is a more representative body, a body of men to whom we can all look up and respect, drawn from all parts of the United Kingdom, and not unduly from one numerically strong portion of it.

MR. G. H. OATLEY [F.], Past President of the Bristol Society of Architects: I am very glad that the last speaker touched on the question of unity. He laid stress on the members in London regarding themselves as separate. I think it is a great weakness in members in London, and it should not be the spirit of this Institute at all. Does the Institute desire to extend its power and usefulness throughout the whole country? I take it that it does. It needs no special inspiration to prophesy that it will fail to do so unless it increases rather than diminishes its union with the Allied Societies. Mr. Perks in his speech at the last meeting assumed that the increase of representation of the Allied Societies means representation of those who are not members of this Institute. This is not the case. In the district which I have the honour to represent it is the membership of the R.I.B.A. that feels aggrieved at the present insufficient representation of the Allied Societies. In Bristol we have 55 members of our society—I am not counting the student members—and of these 19 are Fellows and 11 are Associates of the Institute, that is to say, 30 out of 55, which is a very good proportion. So long as less than half the Institute membership is in London and more than half of it in the Provinces, the proportion of representation from the Allied Societies which is suggested by Clause 10 cannot be regarded as excessive, especially when it is remembered that it is not likely that more than 6 or 7 out of the number proposed would be able to attend the meetings of the Council. I wish, Sir, that those members who are practising in London, doing what they can for architecture and the Institute, could know something about the societies in the country. We in Bristol had to submit our Constitution to you, Sir, and I think it is a very good one, and we are doing loyally all we can for the Institute, and our best to further the advancement of architecture. We see that those who come to our society are fit; and we see that pupils in our offices prepare themselves for the Institute examinations; in fact, many of us will not take them as pupils unless they consent to go through the course.

MR. ADAM F. WATSON [F.], President of the Sheffield Society of Architects: I should like to call attention to a few of the remarks which Mr. Perks made with reference to his amendment. Some of the gentlemen here to-night probably were not at the

meeting I am alluding to, but they have seen what is reported in the JOURNAL. With reference to the particular societies mentioned by Mr. Perks, namely the Edinburgh Association and the Hampshire Society, Mr. Perks spoke about their being composed "mainly of people who had merely an interest in architecture," but on referring to the list of members in the Kalendar for 1913-14, I find 26 of the Edinburgh Association are Fellows and Associates of the R.I.B.A., and the Hampshire Society has 23 members of the Institute, namely, 10 Fellows and 13 Associates. I think it will alter the case considerably in the opinion of members when they know those figures. Mr. Perks thinks the members of the Institute in the Provinces should be represented by the same number as the Associates. But I would like to point out that the members of the Allied Societies are represented more by their Presidents if they get a seat on the Council than by the Metropolitan members of the Council; they are more in touch with them. With reference to the members of the Institute, there are something like 700 Fellows and Associates who are members of the Allied Societies and they are represented for the coming year by only six Presidents of the Allied Societies. Associates who are Presidents of Allied Societies cannot represent their societies on the Council. Take my own society, the Sheffield and South Yorkshire—it embraces a large district, part of Lincolnshire, part of Derbyshire, part of Nottingham, and the district round Sheffield including South Yorkshire. Mr. Mitchell-Withers was a member of the Council previous to me, but I think for something like eight or ten years we have had no representation owing to the fact that the President was not a Fellow of the Royal Institute. The Allied Societies are doing all they can to get architects in the Provinces to join the Institute. The main thing is to get more interest in the Provinces by having a representative on the Council. It is impossible for Presidents of Allied Societies to attend every meeting. It entails great personal expense, and the time spent is even more costly, for it means two days, or a large part of two days, for the purpose. I sometimes wonder how many times the members of this Council who are London members would attend Council Meetings in Scotland or the North of England at their own expense. Mr. Perks stated that according to Clause 10 any Allied Society with 50 members, whether architects or not, would have a representation on the Council; but that is utterly wrong: the Council's suggestion is that if an Allied Society has 50 of its members on the Register that Society should have a representative on the Council.—[MR. PERKS: "Won't they have to be members of the Allied Societies?"] They will be members of their society, but they will not have representation on the Council unless they are Chartered Architects, and the Allied Societies represent the Associates even better.

THE PRESIDENT: We have had a most eloquent exposition of the views of the Presidents of the Allied Societies. They have said some very shrewd and, I think, some very wise things. I shall now call upon Mr. Perks to reply, and after that the matter will be put to the vote.

MR. SYDNEY PERKS: First of all, I should like to answer the following question which was put to me by a member: "Will it make any delay in our Registration scheme if this matter of the Allied Presidents and the constitution of the Council goes back for further consideration?" There is nobody more interested in this great Registration scheme than myself. But this is a By-Law matter, and it does not matter whether we settle the question to-night or whether we settle it six months or a year hence; the Registration scheme can still go on, for the question of the number of representatives of the Allied Societies forms no part of it. There was a suggestion last time that perhaps my figures were not correct. I was very surprised when I got out my figures, and I think members here were rather surprised when they heard them; but I could not have the slightest doubt raised about them. If they were wrong I wanted the chance of correcting them, so I sent a copy of my speech to a firm of chartered accountants, together with my notes with other figures and a copy of our KALENDAR, and asked them to correct them. This is the certificate I got:

"90 Cannon Street, E.C.

"DEAR SIR,—We have checked the figures quoted in your speech at the Royal Institute of British Architects, checked it with the official Kalendar, and certified those figures as correct. We have also checked the figures contained in your notes, and find those correct.—Yours faithfully,

"EVANS, FRIPP, DEED & CO.,

"Chartered Accountants."

I repeat what I said at the last meeting: I believe in the Allied Societies being represented, and I have nothing but praise and admiration for them. But praise of the Allied Societies has nothing whatever to do with this matter. It seems to me that gentlemen do not understand this proposal of Mr. Peach's.

THE PRESIDENT: I must make it clear to the meeting that the proposal to which Mr. Perks's amendment is directed is the proposal of the Council of this Institute.

MR. PERKS: Certainly, sir, I am aware of that. But I tried to differentiate because there has been confusion. Sometimes the Council of the Institute was meant and sometimes the Privy Council where the word "Council" has been used in these debates. Mr. Peach says that the Council feel very strongly that it is in the interests of the Institute that the Allied Societies should be represented by their Presidents. But the proposal of the Council is not on those lines—it is to be the President, or other representative. At the present time it is a benefit to us to have the Presidents on the Council, but this proposal would alter that, the idea being that the representative of an Allied Society need not be its President. That is an entirely different state of things. Apparently the Allied Society could nominate anybody they liked to the Council. ("No, no.") I say they can nominate any Fellow, anybody they like, who is qualified to represent them. Mr. Hubbard, referring to the same point, said that we might have in the future "six or eight Provincial members," but they need not be Provincial members. The Allied Societies have London members: they can nominate a London member to represent them. ("Hear, hear—Why not?") But Mr. Hubbard, who is a member of the Constitutional Committee and a Vice-President of the Institute, finds fault with this. He says: "No Allied Society can be adequately represented by a London man," and yet he is supporting this very proposal of the Council to make it possible for him to be a London man. The country members have a very good chance of being elected. As a matter of fact, at the last election five members of Allied Societies were elected as ordinary members of the Council. One President of an Allied Society called attention to the police work which is done by the Allied Societies in looking after their members. But we are going to have a new state of things when the Register is established: it is proposed to set up a Board purposely to look after the registered men and to do the police work, so that the work which is now done by the Allied Societies will automatically pass to that Board. I would again call attention to a very slight increase in the proposed new Council of our own members, only 4 per cent. increase over the present number, whereas the increase of Allied Society representatives would be no less than 100 per cent. on the number in the present Kalendar list. The proposal seems to be grossly unfair to our own members. ("They are all our own members.") No, sir, those who elect them are not. These Allied Society men are not. In your own society (Northampton) you have only five members of this Institute. [MR. DUNKERLEY: "There are more members in the country than in the town."] Very slightly more, but the point is that our country members as a rule do not join the Allied Societies, and it is wrong for these Presidents to come here and say they represent our men in the provinces. Our members do not belong to the Allied Societies and only a small proportion of our Licentiatees in the provinces—I gave the figures last time—belong to the Allied Societies. I regard this as a matter which is grossly unfair, that a scheme should be promoted here which will make it possible to have a society of 50 men, only one man being a Fellow and the other men not members of the Institute, and yet they can automatically send that man on to the

Council without his going through the ordinary routine of election. ["Why not?"] Because 170 of our Associates are only to be represented by one man, and so the proportion is not fair. [Mr. Warson: "Does that 170 embrace all the Associates in the provinces?"] Yes, all the Associates. They are represented by other men—the men they elect by vote. We have five men from the Allied Societies on the Council now. It is simply a matter of proportion. If you think it fair that 49 men not being our members should be able to send automatically one man on to the Council when that privilege is only given to 170 of our Associates, by all means reject this amendment. I would also call your attention to this fact: that as things go on they will gradually get worse from the representation point of view. The number of Associate representatives is to be fixed at 10, but the number of Associates is constantly increasing. We have 1,700 now, and before long, if we go on at the same rate, we shall have 1,800. The number of Associates increases, but their representation will not increase; it will still stand at 10. The Allied Societies go on increasing, and they will automatically send a representative to the Council. So if you pass this proposal, you are signing a blank cheque, because they will go on increasing, and the representatives of our Associates must in proportion go on decreasing. I think this is a most unjust and unfair proposal, altogether wrong, and that is why I have submitted my amendment.

THE PRESIDENT: We have now to vote upon Mr. Perks's amendment, which is "That Clause 10 be referred back to the Council for further consideration, a revised clause to be submitted to the General Body at an early date—it being distinctly understood that the members of Allied Societies are not to have larger representation on our Council than our own Associates."

The amendment being put to the vote, there voted in its favour 84; against, 163.

THE PRESIDENT: The amendment is lost. Are there any other amendments?

MR. HERBERT A. WELCH [A.]: I regret that previously to your taking the amendment I was not in time to speak on a point of order which I wished to raise. My attention has been called to a document which seems to suggest that the calling of this meeting has a tendency to irregularity, judging from the Institute's usual method of calling these meetings. In the ordinary course of things every member of the Institute receives notice of a meeting, and the notice for this meeting was received, I think, by every corporate member in the usual way. But I understand that in addition to that a circular letter was sent out officially from the offices of the Institute to a certain section of its members, Fellows, asking them to make a special effort to be present to-night. I wish to know if that is strictly in accordance with the procedure of the Council in calling a meeting.

THE PRESIDENT: It is perfectly true that two circulars have been sent out under By-law 39. I will read the By-law: "No notices or other documents other than those necessary for the usual conduct of the business of the Institute shall be issued to the various classes of members and Licentiates, save those directed to be so issued by the Charter or By-laws or by Resolution of the Council, except that in case of emergency the President shall have power to issue any notice he may think fit, provided that he report his action at the next meeting of the Council." That, gentlemen, is the reason. I myself considered that an emergency had arisen. Therefore, having power to issue the notice, I thought fit to instruct the Secretary to issue these circulars, and my action has been duly reported to the Council. And the reason I thought that an emergency had arisen was because unfortunately with reference to this matter politics have been imported into the Institute. We have heard to-night from Mr. Curtis Green a very admirable speech on that subject. (Applause.) I greatly regret, as an artist and an architect of a good many years' experience, and as one who has known the Institute longer than many members in this room—I regret greatly that politics should have entered into it. But it was within my knowledge and observation that those who were opposed to the proposals of the Council had organised—I do not find fault with them for it—an opposition to those proposals, and I considered it

was only right and proper that those members of the Institute who were in favour of the Council's proposals should have their attention called to the gravity of the situation, and the Secretary was instructed to send out the two notices which I will now ask him to read to you, and you can then judge for yourselves. (Much applause.)

The letters were as follows:—

18th June 1914.

DEAR SIR,—

R.I.B.A. Proposals for new Charter.

You will no doubt remember that the proposals for a new Charter and By-laws to enable the R.I.B.A. to constitute and maintain a Register of Architects have been discussed at Special General Meetings on 27th April and 8th June, and that the latter meeting was adjourned while Clause 10 was still under discussion.

By this clause it is proposed to reconstitute the Council of the R.I.B.A. and to make a large increase in the number of provincial representatives. Instead of a maximum of nine Presidents of Allied Societies the proposed Council would probably contain at least 18 provincial representatives.

The Council's object in proposing this change is to bring the R.I.B.A. into closer and more continuous touch with its members in the provinces and to provide them with a better means of expressing their views on professional questions.

As you will see from the report in the last number of the R.I.B.A. JOURNAL this clause met with considerable opposition. It is hoped that members of the R.I.B.A. practising in the provinces will make a special effort to attend the adjourned meeting which will be held at 8 p.m. on Monday, 29th June, so that the views of the provincial members on this important proposal may be adequately expressed.

I should be much obliged if you would kindly fill up the enclosed postcard and return it to me before 29th June.

Faithfully yours,

IAN MACALISTER, Secretary.

19th June 1914.

DEAR SIR,—

Registration.

The Council's proposals for the establishment of a Register of Architects under the control of the Royal Institute will be again discussed at a Special General Meeting on Monday, 29th June, at 8 p.m.

It is of the utmost importance that there should be a large and representative gathering of members present on this occasion, so as to ensure that the decision arrived at will express the considered opinion of the members as a whole.

I shall be much obliged if you will kindly fill up and return to me the enclosed postcard.—Faithfully yours,

IAN MACALISTER, Secretary.

THE PRESIDENT: With regard to these two circulars, gentlemen, I believe they are perfectly constitutional and in order—(applause)—and I used these exceptional powers, which are conferred on the President of the Institute to be used in cases of emergency, because I thought it was absolutely necessary in the best interests of this Institute that I should use them. (Applause.)

MR. WELCH: Might I have one further word, Sir? I think you hardly did justice to the members concerned by suggesting that they had similarly organised a certain section of the Institute members to oppose the Council's proposals. The organisation you refer to has from its inception been entirely outside the walls (officially) of this Institute, which is quite a different matter.

THE PRESIDENT: I do not think this has any bearing on the question. To the best of my knowledge and belief my proceeding was constitutional and in order; I have used the powers conferred upon me, and am not prepared to discuss the matter further or to allow it to be further discussed. I now ask if there are any further amendments to the Council's proposal.

MR. S. DOUGLAS TOFLEY [A.]: I desire to move the following amendment: "That Clause 10 be referred back to the Council for further consideration, a revised clause to be submitted to

the General Body at an early date—it being distinctly understood that the members of Allied Societies are not to have larger representation on the Council than our own Corporate Members." The meeting will appreciate the distinction between the proposal of the Council and the proposal contained in the amendment. The last sentence of the amendment which has now been disposed of laid it down that there should be no larger representation of members of Allied Societies than of the Associates. I seconded that amendment, which Mr. Perks moved: but it occurred to me since that it would be more prudent and wiser to substitute for the word "Associate" "Corporate Member." We have heard to-night some friends from the provinces, and I should like to say how delighted we London men are to have with us this evening representatives from the provinces whose names are household words in the profession, but whose faces are unfamiliar in these rooms. This amendment is based on a principle which has been followed by this Institute, I am told, for 25 years. It has for its object the setting-up of a safeguard which shall ensure that those who have passed an examination shall have as good representation on the Council as those who have not. I am not saying a word against men who do not sit for examinations; I know there is good reason why some men do not. But it is the policy of this Institute to recruit its membership from those who are willing to submit to the test of examination. I do not see why an opportunity should be taken, now that we are going to have a Council on a different basis, of so varying the constitution of our Council as, in effect, to break down the policy which has been followed for 25 years. I do appeal, through you, Sir, to the meeting to refer back this clause, lest the Institute do again what it has done before—make a mistake.

SIR ASTON WEBB, R.A. [F.]: I hope, Sir, you will see that the resolution which has been passed by this meeting is made effective, and that we do not have constant amendments on small things. It does not seem a fair and proper way of dealing with it at all.

MR. BRUCE J. CAPELL [A.]: I second the amendment which Mr. Topley has just moved. We have had for a quarter of a century a constant efflux and reflux of the question which is before us this evening; and it has been settled in one way, and unsettled and resettled in another way, and brought back to the original time after time. Much grievous wrong has been done to many members of the Institute, and we are all willing, cheerfully willing, to come to some arrangement if it can be properly made. But surely it would be better that we should come to an arrangement which can be agreed to by all of us, rather than to have a wretched wound festering in this place for all time in the Institute. It is not in the interests of peace to have a thing which could be, and probably would be, upset. I am sure it is desirable we should get some arrangement which will, more or less, meet the feelings of all. Such a thing is possible. We have had it said repeatedly that the Committee of Associates are setting themselves in opposition to many of the other people. That is very far from our feeling; we are keenly alive to the importance of all pulling together, and are willing to sink very much of what we feel strongly about so that we may all pull together. The suggestion has been made that there is some opposition to the people in the provinces or to the Fellows. But there is not. I ask that the meeting, in considering the amendment, will see how far it can go, because it is not a question of sympathy with us, or of sympathy with the provincial members, or with the various Allied Societies; it is a question of what is right or wrong. And if we are to have representation at all, there should be some sort of proportion in the representation. I put it only on that ground.

THE PRESIDENT: I now put the amendment, proposed by Mr. Topley, and seconded by Mr. Capell: "That Clause 10 be referred back to the Council for further consideration, a revised clause to be submitted to the General Body at an early date—it being distinctly understood that the Members of Allied Societies are not to have larger representation on the Council than our own Corporate Members."

The amendment being put from the Chair, was lost by a large majority.

Clause 10, as originally proposed,* was then put and carried—168 voting for, and 95 against.

THE PRESIDENT: Clause 10 is carried. (Applause.) We now proceed to the revised Clauses 8 and 9, which I will ask the Secretary to read.

THE SECRETARY read the clauses as follows:—

"8.—Representation on this Standing Committee and for the specific purposes only as defined in Clause 7 to be given to Licentiates and to Registered Architects not being Corporate Members or Licentiates. In all other regards the constitutional position of the Licentiates to remain as at present.

"9.—The number of Members of this Standing Committee not to exceed 23, in the proportion of 10 Fellows, 7 Associates, and 6 Registered Architects, of whom at least 3 should be Licentiates, until such date as the class of Licentiates shall have expired."

Clause 8, proposed by Mr. Stanley Peach, and seconded by Mr. A. W. S. Cross, was put to the meeting and carried.

MR. PEACH: I beg formally to move that Clause 9 be approved. It has been said that this Board of Registration will be mainly an administrative Board, and various suggestions have been made for altering the constitution from what is proposed by the Council. I would, however, remind members that, although it is literally correct to say that the province of the Board will be mainly administrative, its most important function is to act as a sort of Court of First Instance of the various cases which are likely to come before it, of members of the profession who have got into trouble. Under those circumstances it is of the first importance that the constitution of the Board should be most carefully considered and that it should consist mainly of men who have had great experience of the profession and of its difficulties. It will be the duty of this Board to examine the evidence which is put before it, and to arrive at an opinion upon that evidence. The report which it will make eventually to the Council of this Institute (which will be the body to pass sentence) will greatly influence the decision of the Council. Under these circumstances wide experience of practice is the first essential for any man who is to serve upon the Board. We have some very valuable information to guide us in this matter in the experience of the Institute, and it has largely influenced the Council in making this suggestion to you. There have existed in the Institute for several years not only the Practice Committee, but a Board of Professional Defence and a Professional Questions Committee. Those Committees have been concerned with innumerable cases of difficulties in practice which have arisen, very similar to those which will come before this Registration Board. I think I am not in any way exaggerating when I say that 90 per cent. of the cases which have come up have concerned the younger members. The difficulties have arisen in nearly every case from lack of experience. Instead of the numbers composing the Board, it has been suggested that there should be proportional representation. Proportional representation would mean that the Board would be composed of two Fellows, four Associates, and five Licentiates, and a number of Registered Architects; that is to say, there would

* (10) The Council to consist of:—

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| 1 President (Fellow). | } <i>Ex officio.</i> |
| 4 Vice-Presidents (Fellows). | |
| 1 Hon. Secretary (Fellow). | |
| 5 Chairmen of Standing Committees (Fellows). | |
| 1 Chairman of the Board of Architectural Education (Fellow). | |
| 15 Ordinary Members (Fellows). | |
| 10 Associate-Members. | |
| 2 Past Presidents (Fellows). | |
| 1 Representative of the Architectural Association (Fellow or Associate). | |

The President or other representative, being a Fellow of the R.I.B.A., of every Allied Society in the United Kingdom having not less than 50 of its members on the Register (or such other number as the Council may from time to time determine).

[Allied Societies having less than 50 members on the Register to be represented on the Council in rotation.]

be a majority of those classes which by the records of the Institute have proved least capable of dealing with the difficult questions which must be expected to arise and come before the Board. That seems an unwise thing. In the opinion of the Council it is absolutely essential that a Board of this kind should be composed mainly of Fellows of the Institute, men who have had the necessary experience of practice. Nearly all the cases will be due to inexperience. I do not believe that the architects in this country need a Disciplinary Board in the ordinary sense of the term, but rather a Board capable of judging, and who have the necessary experience and judgment to enable them to give the right decision for the guidance of the Council in the matter.

MR. HERBERT SHEPHERD: Has that been formally seconded, Sir?

THE PRESIDENT: It is seconded by Mr. Guy Dawber.

MR. SHEPHERD: I have the honour to represent a different point of view from that put forward by Mr. Stanley Peach on behalf of the Council. In the first place, I think it behoves anyone, at this particular meeting especially, and as representing the views of, I believe, the majority of the junior members of the Institute, to make it clear that so far as we possibly can we are all agreed and united in one effort to make this Register a success. We want to make it a success, we are endeavouring to make it a success; but I submit, Sir, that the Council's proposal in Clause 9 as now drawn will not be a success. Mr. Peach has, for the first time this evening, given us what he, and I presume the Council, considers will be the real function of the Registration Board or Authority. He has told us of the inexperience of the younger men and of the cases which come before the Practice Committee and Board of Professional Defence. The Practice Standing Committee of the Institute cannot take independent action, it has to report to the Council, and is mainly for the corporate members and Licentiates. All this has nothing whatever to do with a voluntary register of qualified architects, the functions of the Board or Authority of which—as set out in Clause 9 by the Council—are entirely different. The Board as proposed will have no executive power. It is simply a registering authority and nothing else, and will have to report to the Institute Council. It will not in any way take the place of the Practice or any other Committee of the Institute, and I for one fail to see how it is possible for my friend Mr. Stanley Peach to read into these proposals anything of the nature he has for the first time told us to-night. This voluntary Register, as I understand it, if it is to be useful at all, is to get into touch with, to get upon one common Register, all men who are qualified architects. In the first place, the clause as drawn is ambiguous. There are to be six men to represent Registered Architects and Licentiates, and you say "six Registered Architects, of whom at least three should be Licentiates, until such date as the class of Licentiates shall have expired." Apparently the men of first instance who are not Licentiates and who are unattached are to go on for ever, and whether with three or six representatives it is impossible to say. It is really humorous, Sir, but that is what you say here. I move "That Clause 9 be referred back to the Council for further consideration, and that a revised clause be submitted to the General Body, embodying the principle of proportional representation of the various classes of Registered Architects upon the Register, provided always that the high Chartered Officers of the Institute shall be members of the Board or Authority." Mr. Stanley Peach has given you proportional representation from his point of view, omitting the most important factor of this question if we who are to maintain the Register are to make it a success. You will understand we want to make the Institute "top dog" all through; therefore I have suggested that we should have on the Board the President, four Vice-Presidents, and one or more Honorary Secretaries; that makes six Fellows to start with. It is entirely in the wisdom of the Council to devise a better scheme than that. If this amendment is accepted the Fellows will be represented by eight, the Associates by four, the Licentiates by five; and if we take the figures as given by Mr. Hall—I think it was 2,000 or 2,500—there would be about six unattached architects. So that in all cases the corporate members will be in the

majority, much more so as time goes on and the unattached men and class of Licentiates decrease. The object is to get upon this Register men who are not attached to us but who are qualified to practise architecture. I suggest we shall always be in a majority if we have on the Board our principal officers and corporate members to the number of 12; and if this Register is to be a success, you must give proper representation to the unattached men who are to be asked to sign a Declaration—and you must give them proportional representation. It will be a fundamental mistake for this Institute to attempt again to set up a different body of professional members attached to but outside of us which is not advantageous to the Institute as a whole.

MR. S. DOUGLAS TOPLEY [A.]: I desire to second the amendment, which has for its object the setting up of a Registration Advisory Board on the basis of proportional representation. Our sole object in submitting this amendment is to make the Register attractive to the very men whom we desire to attract. Since the original proposal of the Council, they have suggested that six Registered Architects shall be on this Board, not less than three being Licentiates. We are sometimes asked to justify our amendments, and we are entitled to ask on what basis the Council arrived at their figures. I have looked at the matter carefully, and can see no justification for the figures. There are too few on the Board if they are men to be trusted, and too many if they are not. It is necessary that the Board shall be correctly representative of the opinion of those they represent. Mr. Peach said there would be fewer men of experience than inexperienced men on the Board as we suggest it, but he forgot that it is an essential part of the proposition that the Chartered Officers of this Institute, six Fellows, shall be *ex officio* members of this Board, and that gives you eight Fellows, four Associates, five Licentiates, and an unknown number of unattached architects. But if you take the enormous total of 2,400 men who are to be attracted to the Register, but who are not at present connected with us, you only get six, and that makes eleven unattached architects to twelve members of the Institute. It is late, and I will occupy the meeting no longer; but I fear that if you insist on passing this as it stands, you will not attract a sufficient number of unattached architects to the Register to justify the application to the Privy Council.

The amendment being put to the vote was lost—76 voting in favour, 160 against. The original resolution was then put and agreed to.

MR. PEACH: I move Clause 11: "The R.I.B.A. to be empowered to issue a scale of fees payable to Architects on the Register."

The Resolution, seconded by MR. GEORGE HUBBARD, was agreed to.

MR. PEACH: Clause 12: "The R.I.B.A. to have enlarged powers of holding property."

The Resolution, seconded by MR. G. LEONARD ELKINGTON [A.], was agreed to.

MR. PEACH: I propose Clause 13: "The By-law in regard to the Board of Architectural Education to be revised so as to confer upon certain Schools of Architecture the privilege of representation on the Board."

The Resolution was duly seconded and agreed to.

THE PRESIDENT: We have now Mr. Welch's amendments.

MR. WELCH: Since I raised the question of the manner in which this meeting was called, I have had time to consider the President's ruling on the matter. I find myself entirely at discord with this ruling, and I therefore do not consider the meeting as called is competent to deal with the questions standing in my name.

THE PRESIDENT: Then you withdraw them?

MR. WELCH: I withdraw them.

MR. PEACH: I have now to move that as the proposals have received the approval of members, that the Institute Solicitors be instructed to prepare the necessary petition for submission to the Privy Council; that is to say, that the new Council will have the business of settling these details and preparing a petition, which will, in due course, be submitted to the Institute.

MR. ERNEST NEWTON: I have pleasure in seconding that.

MR. SHEPHERD: Mr. President, as I understand you say that these are resolutions, and as Clause 13 is a matter of By-law and Clause 12 deals with the property of the Institute, is it not necessary under the Charter and By-laws that before we can proceed further a confirmatory meeting must be held, especially so with regard to dealing with the property of the Institute?

THE PRESIDENT: I should like to look into that point; I am not prepared to give a decision upon it now. I understand it comes up automatically.

MR. SHEPHERD: These proposals must come up for confirmation before we can proceed with them.

THE PRESIDENT: Mr. Peach, will you move your resolution again?

MR. PEACH: I beg to move that as the proposals have received the approval of members, the Solicitors to the Institute be instructed to prepare the necessary petition for submission to the Privy Council.

MR. NEWTON: I beg to second it.

MR. H. V. LANCHESTER: Does it mean that these proposals go from this meeting to the Solicitors, or do they come again before the Council first?

MR. PEACH: It authorises the Council to go on with it.

MR. LANCHESTER: With the aid of the Solicitors?

MR. PEACH: Yes, I accept that; the Council in conjunction with the Solicitors. We will put in the words "by the Council."

MR. TOPLEY: I understand you to explain that the new Council has no power to hand this over to the Solicitors until Clause 12 has been confirmed.

THE PRESIDENT: No, no. I understand the position will be this: The Council will instruct the Solicitors, and the Solicitors will prepare the draft petition. They will then take it, informally, to the Privy Council. Having done that, it will come back for confirmation to this meeting. Does that clear up your point, Mr. Topley?

MR. TOPLEY: This is an instruction to the new Council?

THE PRESIDENT: Certainly.

MR. TOPLEY: It may all fall to the ground at the next meeting.

THE PRESIDENT: It has to be confirmed when it comes in the final form as a Petition.

MR. TOPLEY: I am asking for your ruling.

THE PRESIDENT: I am informed that Clause 12 is not on a different footing from the other clauses.

MR. TOPLEY: You rule that all the clauses are on the same basis?

THE PRESIDENT: Yes; but you must not nail me down too closely to this matter; it needs looking into. Except that I retire from the Chair to-night, I should look into the matter closely so as to get at the exact reading of the Constitution; you can rely on the matter being honestly dealt with.

MR. ERNEST NEWTON: There is not likely to be opposition to the Council holding more money, is there?

The resolution having then been put to the meeting and carried, the proceedings came to an end.

Among members present, besides members of Council and those who took part in the discussion, were Messrs. Maurice B. Adams [F.], Graham C. Audry [F.] (Bristol), Arthur Blomfield [F.], Charles J. Blomfield [F.], Detmar Blow [F.], C. C. Brewer [F.], C. H. Beadie [F.], S. H. Capper [A.], Max Clarke [F.], T. E. Collett [Past President], Alfred Cox [F.], H. O. Cresswell [F.], W. Vernon Crompton [F.], C. Fitzroy Doll [F.], Horace Farquharson [F.], Sir Ernest George, A.R.A. [Past President], James S. Gibson [F.], Mowbray A. Green [F.] (Bristol), Edward Greenop [F.], Sidney K. Greenlade [A.], Matt. Garbutt [F.], F. T. W. Goldsmith [F.], E. J. Gosling [F.], L. Rome Guthrie [A.], Noel W. Hadwen [A.], H. Austen Hall [F.], E. Vincent Harris [F.], O. C. Hills [F.], H. G. Ibberson [F.], A. R. Jemmett [F.], Geoffrey Lucas [F.], Walter Millard [A.], O. P. Milne [F.], D. Barclay Niven [F.], Godfrey Pinkerton [F.], Andrew N. Prentice [F.], Professor E. S. Prior, A.R.A. [F.], Harry Rodfern [F.], W. Gillbee Scott [F.], A. Dunbar Smith [F.], A. Saxon Soell [F.], Ernest R. E. Sutton [F.] (Nottingham), Sir Henry Tanner [F.], Sydney Tatchell [F.], Sir A. Brunsell Thomas [F.], F. W. Troup [F.], Percy B. Tobbs [F.], W. Henry Ward [A.], Paul Waterhouse [F.], H. H. Wigglesworth [F.], A. Seedham Wilson [A.].

CORRESPONDENCE.

The R.I.A.I. and the Alternative Policies "Charter" and "Bill."

Royal Institute of the Architects of Ireland, 31 South Frederick Street, Dublin, 14th July 1914.

To the Secretary R.I.B.A.,—

DEAR SIR,—At the General Meeting of the R.I.B.A. held on 8th June last Mr. Blomfield is reported in the JOURNAL to have said, in answer to a question by Mr. Sylvester Sullivan:—

"With regard to the first question, letters from the newly elected President of the Royal Institute of the Architects of Ireland, together with reports received of recent meetings of that body, appear to indicate that the Royal Institute of the Architects of Ireland is now undecided in its attitude towards the alternative policies 'Charter' and 'Bill.' We have no reason to believe that other societies have changed their minds."

As this statement by Mr. Blomfield might naturally be taken to mean that the Royal Institute of the Architects of Ireland had altered its attitude in regard to Registration proposals, my Council would desire to correct such a possible misconception and to make its position clear. Our Institute has consistently supported the policy of Registration by Act of Parliament for many years. When the alternative proposal of Registration by Charter was submitted to our Institute we declared ourselves in favour of the Bill being passed subject to such modifications as may be considered desirable and necessary. In the correspondence which has lately taken place between the Royal Institute of British Architects and the President of our Institute we think it has been made abundantly clear that, while holding to our opinion as to Statutory Registration being the only means by which the disabilities under which our profession labours can be removed, if it be established that the promotion of a Registration Bill in Parliament is at present impossible owing to the congestion of public business, our Institute is ready to give very careful consideration to the alternative policy put forward by the R.I.B.A.

Our Council feels that, in a matter of such profound importance to the profession at large, our Institute is justified in asking for the fullest possible details of the Charter scheme, and would again—as it has done in recent correspondence—urge the Royal Institute of British Architects to provide for laying these details before our members by means of a deputation to Dublin formed of one or more members of the Council of the R.I.B.A. Such an explanation of the policy and details of the proposed Charter becomes the more urgent seeing that our Irish Institute is not now represented on your Council.—Yours faithfully,

FREDK. G. HICKS [F.], Hon. Sec. R.I.A.I.

The Allied Societies.

The Guildhall, E.C., 13th July 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—At the meeting on June 29th one speaker inferred that an Allied Society subscribes to our funds, and I forgot to reply to him.

The whole of the Allied Societies put together do not contribute one penny: on the contrary, they are a heavy expense to the R.I.B.A. This can be verified by referring to the Annual Report published in the JOURNAL of 9th May 1914, page 426. The following are extracts:—

"Contributions to Allied Societies ... £538 2 6"
 "Presidents of Allied Societies ... £81 12 6"

For the year 1913 they cost us £619 15s.

On the other side of the balance sheet there is no entry, for nothing was received from them.

Yours obediently,

SYDNEY PERKS [F].

The New Charter.

Birmingham, 10th July 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—I have so far failed to discover the particular advantages of the new proposals. They appear to offer no protection against the incompetent practitioner or those undesirable individuals who bring the profession into disrepute. Yet this trouble is surely the primary object of Registration!

Under the new proposals it would appear that the engineer, the builder, the auctioneer and estate agent, county or municipal surveyor, the builders' draughtsman and shop foreman may still call themselves "architects," and may continue to disfigure the landscape with their desperate perpetrations and annoy tenants and others with their badly arranged plans.

Recently an official in a County Education Office showed me some plans (kindly concealing the author's name) which had been submitted to him in connection with proposed new school premises. The drawings would have disgraced an apprentice, being hardly intelligible, whilst the poverty of the design was most extreme. The managers of the school in question referred to the author of the drawings as "our architect," but I was told he was, or had been, a builders' draughtsman. The county official remarked to me that he could not understand why genuine architects did not take steps to put an end to these unsatisfactory doings. "Why," he said, "I might call myself an architect and start in practice to-morrow if I liked."

Will the new Charter have any effect in this direction? It must be obvious that those who are responsible for these irregular proceedings know perfectly well that they are not doing a regular thing. But they are not likely to abandon their unfair methods simply because architects are nominally divided into three classes—"Chartered Architects," "Registered Architects," and "Architects."

As might be expected, Licentiates are organising definite opposition to those clauses of the Charter which separate them from corporate members of the R.I.B.A. and class them with those architects who have not taken the R.I.B.A. diploma. Whilst I sympathise with this objection, I doubt if the question is very important, because, so far as the outside public is concerned, the difference between "Chartered"

Architect or "Registered" Architect is no more than between "Tweedledum" and "Tweedledee."

But if the outward aspect is unimportant, the inward case cannot be altogether ignored, and it presents some curious features. The Licentiate class was ostensibly formed to strengthen the R.I.B.A. in its efforts to promote a claim for Registration.

The R.I.B.A. was admittedly handicapped by the fact that its members only constituted a decided minority in the profession, and consequently architects who were not members were invited to come within its portals so as to remedy this defect—and incidentally to enrich its treasury. As a further inducement it was pointed out that when Registration came into force those architects who availed themselves of this offer would be in a better position than those who did not. As a result a large number of architects joined the new class of Licentiates, and among its ranks are to be found many provincial practitioners of high reputation, whose previous neglect of the R.I.B.A. was probably due to the fact that the R.I.B.A. methods and general attitude upon current matters did not appeal to them.

The proposals of the new Charter do not fulfil the conditions I have indicated, and if they could be brought into force as they stand (which seems beyond all possibility), the probable result would be the wholesale resignation of Licentiates, who would find no reason for continuing to subscribe.

In the profession to-day there is probably little difference of opinion upon the main principle of Registration. It is safe to say that a large majority would approve the closing of the profession with protective measures against unfair competition. But it is not enough for the R.I.B.A. to say, "We do not approve of these irregular proceedings, and we invite the public not to participate therein." The transgressing minority must be forcibly prevented from injuring the majority, or no practical result will ensue.

Apart altogether from the narrow and partisan lines upon which it is drawn, this proposed Charter is really a hopeless attempt to achieve by half-hearted words an objective which can only be attained by whole-hearted deeds. And it is an attempt that is not likely to advance our position in the eyes of the legal or medical professions, let alone the general public.

Yours faithfully,

A. SEYMOUR REEVES, *Licentiate*.

Sunlight and the Colours of Stained Glass.

13th July 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—I was interested to see the letter by Mr. Waldram in your last issue, reviving the hydra-headed legend, if I may be so rude as to term it such, that ancient stained glass differs from modern in possessing some mysterious power of "depolarising" light (rather an unfortunate expression that, by the way) in virtue of which the light passing through it is not coloured.

The idea has found wide credence in the past, and has crept into print on many occasions—if I remember rightly the vergers at York Minster include it in the description of the glass they give to tourists. It must have originated from the fact that when the sun shines on an old window, shafts of more or less brilliantly coloured light stream through it on to the pavement where repairs have been inserted, whereas the old glass itself shows a suffused glow. But there is nothing mysterious about this: the explanation can be readily grasped by a simple experiment. If Mr. Waldram would take a sheet of tissue paper with a small hole cut in the centre and paste this over any ordinary window through which the sun is shining he will find that the light will be diffused and dispersed by the paper: the sunbeams no longer stream through the window, except where the clear glass is exposed by the hole cut in the paper. This is exactly what happens in the case of stained glass—when new it is transparent, and freely transmits light, but in course of time by surface corrosion it gradually acquires a film or patina on the surface which diffuses the light in the same way as the paper. A film of dust or dirt may have the same effect, and a patch of new glass in an old window is readily detected in this way. But to suggest that the diffused light passing through the old glass and causing it to glow rather than sparkle in the sunlight is devoid of colour is absurd; if it were, how could we see the colours of the glass? More careful observation shows that the stonework acquires a most delicate bloom of subdued colour where it is lighted by an old window—it is only by contrast with the vivid patches of colour thrown by clean transparent glass that it appears colourless. I suggest that if Mr. Waldram were to see the colour thrown on the floor by the glorious west window of Chartres, or sit in Bourges Cathedral towards sunset and notice how the stonework responds to the glow of colour thrown on it by the magnificent thirteenth century windows of the clerestory, he would realise the truth of this.

I have ventured to trespass on your space because an understanding of this point has some practical importance. To think that ancient stained glass has no power of communicating its colour to its surroundings is to miss one of its greatest charms. Take the case of La Ste. Chapelle in Paris, for example. In ignorance of this principle, the whole of the stonework has been covered with an elaborate design in oil paint with a prevailing deep tint which absorbs practically all the light that falls upon it, and consequently the stonework does not harmonise with the windows. Beautiful as the windows are, I vaguely felt something lacking when I first visited the building, and it was not until revisiting it after noting the examples I have just referred to that I realised the cause and exclaimed, "O that I could be let loose in La Sainte Chapelle with a bucket of whitewash and a very small packet of yellow ochre."

The mere fact that, to my certain knowledge, modern copies of early glass have sold for large sums at public auction is sufficient to indicate that there is no such fundamental difference in the quality of ancient and modern glass; but even if there were, I would assert that the advantage from an æsthetic point of view is with the modern glass.

It is true, as Mr. Waldram suggests, that as a rule one can detect modern repairs in ancient glass by their comparative brightness—but, were I so inclined, I would cheerfully undertake to palm off forgeries on the unwary collector who relied solely on this criterion. I would ask anyone who thinks old glass can be identified by this esoteric quality to test their belief by making an exact plan of the old and new glass in, say, the east window of Poitiers Cathedral, or the "Acts of Mercy" at All Saints, North Street, York. Surely it is time to abandon the popular idea that there are any "lost secrets" in the technique of glass painting. The glass-painter of to-day has at his command every material that his mediæval predecessors employed, and many additional facilities which modern science has placed at his disposal. The stained glass of to-day can be everything that it was in the past, and more, given sufficient enthusiasm and that consummate craftsmanship which is a product of genius and honest hard work. These are the only secrets really worth knowing.

Yours faithfully,

NOEL HEATON.

James Mitchell Whitelaw Memorial.

To the Editor, JOURNAL R.I.B.A.,—

SIR.—It has been repeatedly proposed that some small tribute should be paid to the memory of the late James Mitchell Whitelaw. The extent of this wish among the large circle of his friends and persons unacquainted with him justifies us in the belief that something may be done to carry these views into effect.

In the death of Mr. Whitelaw, it is generally admitted, the architectural profession lost a recruit who by his uncommon talents and personality had shown promise of a brilliant career. His grasp of the principles of monumental design was extraordinary in so young a man; and his gift of teaching and imparting enthusiasm to others, combined with a fine character and a highly sympathetic personality, have urged friends and admirers alike to make every effort possible to raise some mark of their esteem which may serve in a small, unassuming way to record his life and memory.

It is felt that the most becoming form of memorial to him would be secured by the preservation of his work and his designs, and if a generous response be made to our appeal, a small publication accompanied by an introductory essay would be forthcoming.

The amount of material is so considerable that a selection will have to be made of his studies. These comprise numerous prize designs of the Royal Institute

of British Architects, the Royal Academy, and the Glasgow School of Art; various other design studies, a series of beautiful measured drawings, and many miscellaneous freehand drawings. We have fortunately secured permission to include as a frontispiece an excellent portrait in charcoal done from the life not long before his death last July. The plates, about forty in number, will be done in collotype, measuring approximately 15 inches by 11½, and will be issued in book or portfolio form as desired.

It will greatly assist in the production of the work if intending subscribers will kindly fill up and forward the appended subscription form before 31st July, as only a limited number of copies will be printed. Each copy will contain a list of subscribers.

It is hoped to be able to present to subscribers, and to subscribers only, a work of very moderate cost which while possessing the character of a memorial shall form an interesting collection of studies in architecture.—Yours faithfully,

WALTER L. CLARK. C. DE GRUCHY.

CYRIL A. FAREY. ARTHUR G. SHOOSMITH.

GEOFFREY FILDES. THOMAS S. TAIT.

PHILIP E. WEBB.

The subscription price is 21s.; carriage paid, 22s. Subscriptions are payable to Mr. Geoffrey Fildes, 11, Melbury Road, Kensington, W.; other communications should be addressed to Mr. A. G. Shoosmith, 10, Gt. Ormond Street, W.

Architectural Tour in South France.

The University, Sheffield: 19th July 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Will you kindly grant me space in your correspondence columns in which to draw attention to the fact that the final arrangements for the above tour are now being made, and that those desirous of attending should send in their names as soon as possible?

The tour will start on 31st August, and the following places will be visited: Poitiers, Lunoges, Périgueux, Cahors, Conques, Rodez, Rocamadour, Cordes, Carcassonne, Nîmes, Arles, Avignon, Orange, Le Puy, Issoire, and Clermont Ferrand.

In order to obviate any possible misunderstanding, I may say that the tour is open to all interested in the study of architecture, whether ladies or gentlemen.

I shall be glad to send further particulars of the tour to any desiring them.—Yours faithfully,

W. S. PURCHON,
Lecturer in Architecture.

"Beautiful London": Two Inexpensive Improvements.

New York, 30th June 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—There are two simple suggestions in Mr. Davison's paper (JOURNAL R.I.B.A., 23rd May 1914) which could be carried out at a moderate outlay. Why cannot the London Society, or some of our influential Hon. Associates, put matters in train in the proper quarter? So many proposals, so little attempted! No other street in London except per-

haps Portland Place is so suitable for tree-planting as Whitehall. How refreshing would be an avenue of planes there as on the Victoria Embankment—a row along each kerb, as well as down the middle of the roadway to form a refuge there. The other suggestion I would emphasise is that for more seats, particularly in the Mall. With our cheeseparing notions, Governmental and Municipal, it is Utopian to expect that any of the big proposals our members and others have made in Papers read during the past twenty years will be carried out; but these two items are comparatively inexpensive, and would give immediate enjoyment. It is a disgrace that groups of sculpture have never been added to the pedestals on the Embankment—such a condition of things would be impossible even in a South American republic. Mr. Davison truly says, "Our architecture to-day represents very fairly the times and the people," and he adds, "We are all out to make money chiefly. It is a bad aim." To make it easily, and spend it on personal luxury—on anything but noble architecture, sculpture and kindred arts that develop the highest instincts of man, when not on the road to decadence, individually and imperially.—Yours truly,

EDWARD W. HUDSON [A.]

Books received.

- Violet-le-Duc: Sa vie, son œuvre, sa doctrine. Par Paul Gout, Architecte-en-chef des Monuments historiques. With 68 illustrations. 40. Paris 1914. [Edouard Champion, 5 Quai Malaquais, Paris.]
- Growth of the Building of the American Museum of Natural History. Plans for Future Building and Arrangement of Collections. Second Edition. May 1912.
- Etudes d'Art Contemporain.—Henry Van de Velde et le Théâtre des Champs Elysées. Par Jacques Mesnil. 40. 32 pp. Librairie G. Van Oost & Co, Bruxelles et Paris.
- Westminster Hall. Report of the First Commissioner of H.M. Works, &c., on the Condition of the Roof Timbers of Westminster Hall, with Suggestions for maintaining the Stability of the Roof. By F. Baines, M.V.O. Fo. Lond. 1914. 1s. 4d. [Wynan & Sons, Ltd., 29 Breema Buildings, E.C.]
- Building Construction Drawing: A Class-Book for the Elementary Student and Artisan. By Richard B. Eaton, Lecturer on Building Construction, Poole School of Art and Technology. Part I. 20 Plates. 1s. 8s. Lond. 1914. [R. & F. N. Spon, Ltd., 67 Haymarket.]

Trade Publications.

- Illustrations of Ornamental Wrought-Iron Work, Staircases, &c., recently completed, issued by Messrs. H. & C. Davis & Co., Ltd., Light Constructional Engineers, Clapham, S.W.
- "The 'Isothermal' (Electric Control) Valve," an illustrated booklet dealing with the Automatic Regulation of Temperature, issued by Messrs. James Baldwin & Co., Engineers and Founders, Devonshire Brass Works, Keighley.
- "Nori" Red Facing Bricks, Terra Cotta, &c., No. 3 Illustrated Catalogue, issued by the Acerrington Brick & Tile Co., Ltd., Winney Hill, Acerrington.
- "Steel Rolling Shutters and Doors," being an illustrated description of Milners' Patent Interlocking Slat Steel Rolling Shutters and Doors, with scale drawings illustrating Chain Gear, Bevelled Gear and Self-colling Types of Shutters, also Hinged, Sliding, and other types of Strong-room Doors.
- "Steel Cabinet Work." An illustrated booklet of Steel Desks, Cabinets for Architects, Card Index Cabinets, Filing Cabinets, Library Shelving, &c., manufactured by Milners' Safe Co., Limited. An abridged Catalogue of Safes and Strong-room Doors. [Milners' Safe Co., Milners' Buildings, Finsbury Pavement.]
- The "Heaped" Fire, The "Mortimer," "Harley" and "Somex" Patent Cooking Ranges and Baths, Lavatories and Sanitary Fittings, Illustrated abridged Catalogue containing various designs, issued by Messrs. Bratt, Colbran & Co., and The Heaped Fire Co., Limited, 10 Mortimer Street, W.



9 CONDUIT STREET, LONDON, W., 25th July 1914.

CHRONICLE.

Mr. Blomfield's Retirement from the Presidency.

Mr. Reginald Blomfield's term of office as President expired with the last meeting of the Session on 29th June. The business before the Meeting had attracted a large attendance, nearly 300 members being present, and after the formal introduction of new members, the President-elect, Mr. ERNEST NEWTON, A.R.A., came to the platform and addressed the meeting as follows:—

As this is the last meeting of the Session, I hope I may be allowed, before the business of the evening begins, to propose a vote of thanks to our President. (Loud applause.) Only those who have had the privilege of serving and working with Mr. Blomfield, on the Council and on Committees, can know how much time and thought he has devoted to the interests of the Institute—(hear, hear)—and with what conspicuous ability he has conducted its affairs. It is not only for work in the Institute that we have to thank him, but also for much work outside. He has had official dealings with Government Commissions and Departments, with municipal and other authorities, and also with our colleagues in Paris; and his one thought and care has been to uphold the dignity and influence of the Institute. (Hear, hear.) I venture to say that Mr. Blomfield will long be remembered as one of the most brilliant and popular Presidents we have ever had—(applause)—and I will ask you, gentlemen, to give him a very hearty vote of thanks. (Prolonged applause.)

Sir ASTON WEBB, R.A., Past-President: Without detaining the Meeting from the important business before them, I may say I am sure it is delightful to all of us, if we do not agree on everything, to agree on something; and we all agree with this vote of thanks to our President for what he has done during the two years that he has served us. It is no small business to act as President of this Institute for two years, especially with the work that is now going forward. We have been proud of our President wherever he has been; we have been proud of him at the Institute, proud of him socially, proud of him at all the official meetings and functions that he has attended. He has always upheld the honour and

dignity of the Institute, and I do not think anybody could have done better than he has. I will only second, with the greatest cordiality, this vote of thanks to Mr. Blomfield for his two years' service in the Chair. (Applause.)

The PRESIDENT (who on rising was enthusiastically applauded) said: Gentlemen, I am not going to detain you with a speech, because we have a great deal of important business before us, but I must thank you, Mr. Newton, and you, Sir Aston Webb, and all of you, gentlemen, for the very kind way in which you have treated this matter. It has been a great honour to me to occupy this Chair, and a pleasure to do all that I could to maintain the prestige and advance the dignity of the Institute. Though we have not always seen eye to eye, I feel convinced we have all had the same object in view: the advancement of architecture, and the maintenance of the Institute as the custodian of the architecture of this country. (Hear, hear.) I thank you very sincerely and heartily; and I hope you will think kindly of me, even if you do not agree with me. (Applause.)

The Proposed New Charter: Question in Parliament.

In the House of Commons on the 17th inst., Mr. Stuart-Wortley asked the President of the Board of Education whether the Royal Institute of British Architects was applying for a grant of a new Charter; whether an opportunity would be given for petitions to be presented by persons whose interests are affected by the modification of such Charter; by what authority the questions raised by such petitions would be heard and determined; and whether he could give any information as to the time of such hearing and the procedure to be followed.

Mr. J. A. PEASE: I am informed by the Lord President of the Council that no petition to the King in Council praying for the grant of a new Charter to the Royal Institute of British Architects has been lodged at the Privy Council Office. Should any such application be made, formal notice of the presentation of the petition would be published in the *London Gazette*, and persons interested could then lodge petitions for or against the Charter prayed for. All such petitions, together with the original petition, are referred by His Majesty to a committee of the Lords of the Council for consideration and report.

Royal Institute of the Architects of Ireland.

At a general meeting of the members of the Royal Institute of the Architects of Ireland, the President, Mr. R. Caulfield Orpen, R.H.A., in the Chair, the following resolution was passed: "In view of the recent attitude of the R.I.B.A. in relation to its proposed Charter and the subject of representation which the proposals involve, this meeting would urge the Council of the R.I.A.I. to take action in obtaining for this Institute permanent and adequate representation on the Council of the R.I.B.A., and to consider the propriety of supporting the principle that every member of the R.I.B.A. should be entitled

to register his vote on all questions of architectural policy without personal attendance at the London meeting."

British School at Rome: Award of Architectural Scholarships.

The Royal Commissioners for the Exhibition of 1851 have awarded the Rome Scholarship in Architecture, 1914, to Mr. Philip Dalton Hepworth [A.] on the recommendation of the Faculty of Architecture of the British School at Rome, and, on the recommendation of the same body, the Royal Institute have awarded the Jarvis Studentship to Mr. Ernest Cormier. The Rome Scholarship, which is of the value of £200 per annum and tenable for three years at the British School at Rome, is open to students of British nationality under thirty years of age. The Jarvis Studentship, which is awarded on the result of the final competition for the Rome Scholarship, is offered to the Student or Associate of the Royal Institute who is placed next in order of merit to the winner of the Rome Scholarship. The studentship is of the annual value of £200, tenable at the British School at Rome for two years.

Mr. Hepworth, the winner of the Rome Scholarship, is twenty-six years of age, and has studied both at the Architectural Association of London and at the Ecole des Beaux-Arts in Paris. Mr. Cormier, who wins the Jarvis Studentship, is a French Canadian, having been born in Montreal in 1885. He is a Bachelor of Applied Science of the Polytechnic School of Montreal, has obtained the Certificate of Study in Architecture at the Ecole des Beaux-Arts, and has just been registered as a *Student R.I.B.A.*

The work done by the competitors was on exhibition for some days at Crosby Hall, where the examinations were held.

Proposed Parliamentary Committee of the Fine Arts.

It is proposed to form a Parliamentary Committee consisting of members of both Houses interested in art matters. The objects which such a committee would have in view would be partly general, partly special. Under the general head would come the question of increasing the national collections. Another question is the proposed Ministry of Art. Again, special questions, mainly of administration, are arising constantly in connection with the Government Departments relating to art. The Office of Works, the London County Council, and other authorities frequently have to decide questions of great public and artistic importance in the decoration of parks and the erection of public buildings or monuments. Such a committee as that proposed could direct public attention to what was being done. A number of members of both Houses and all parties interested in matters relating to art have already accepted the invitation to join the proposed committee. They include Lord Crawford, Lord Bryce, Lord

Curzon of Kedleston, Mr. A. A. Allen, Sir George Agnew, Lord Henry Bentinck, Sir Edward F. Coates, Mr. Stephen Gwynn, Sir Alfred Mond, Mr. Almeric Paget, Sir Gilbert Parker, Sir Herbert Raphael, Mr. Philip Snowden, Mr. Edward Wood, and Mr. Montague Barlow, hon. secretary *pro tem.*

Professional Etiquette.

The Council having decided that a notice with regard to professional advertising by architects shall be inserted from time to time in the public Press, arrangements have been made for the periodical appearance of the following notice in the *Times*, *Morning Post*, and *Daily Telegraph* :—

Professional Advertising by Architects.

The Council of the Royal Institute of British Architects desire to make it known to the public that it is not in accordance with professional etiquette for Architects to advertise for work. Members and Licentiates of the Royal Institute of British Architects are not permitted to advertise.

Memorial to Mr. Norman Shaw at Scotland Yard.

A portrait medallion of the late Mr. Norman Shaw, which has been placed on the north side of Scotland Yard facing the Embankment, was unveiled last week by Lord Plymouth. Among those present were Lady Plymouth, Sir Edward Poynter, P.R.A., who presided, the President of the Royal Institute (Mr. Ernest Newton, A.R.A.), Sir Aston Webb, R.A., Sir John Burnet, A.R.S.A., and several other leading members of the Institute, Sir Thomas Jackson, R.A., and Sir Edward Henry, Commissioner of Police. The medallion has been placed immediately below the middle balcony on the third floor. It is the work of Mr. Hamo Thornycroft and Professor Lethaby, and is executed in bronze gilt. The portrait bust is in profile, surrounded by a wreath of oak-leaves. Sir Edward Henry, in proposing a vote of thanks to Lord Plymouth for unveiling the memorial, mentioned that it was largely due to his lordship's generosity that it had been possible to erect the memorial.

The Development of Steel Construction.

Through the generosity of Sir R. Rowand Anderson [F.] two special prizes of £40 each have just been awarded by the Edinburgh Architectural Association. The prizes were offered for the encouragement of the study of the development of steel construction, more particularly as exemplified in the work of France and Germany, and were open to any two members of the architectural profession in Scotland, over twenty-one and not over thirty years of age, whom a special committee appointed by the Council of the Edinburgh Architectural Association should deem most suitable for prosecuting this special study. The prizes have been awarded to Mr. William Paterson [A.], *Pugin Student* 1913, of Edinburgh, and Mr. James McLaren Brown, of Hamilton, N.B., who will be required to spend not less than eight weeks studying on the Continent, and within ten months of starting on their

tour to furnish the Edinburgh Association with a Paper descriptive of their studies and illustrated by sketches, measured drawings, etc.

Town Planning Tour: Reception at the Institute.

The members taking part in the tour and congress of the International Garden Cities and Town Planning Association were the guests of the President and Council of the Royal Institute at a reception given in their honour at the R.I.B.A. Galleries on Friday, 17th July. Over 150 members were present, including representatives from America, Australia, Belgium, Canada, France, Germany, Holland, Italy, Poland, Russia, Spain. France, Germany, Russia, and the United States were especially well represented by high Government and municipal officials, among them several architects who are concerned in the town planning and housing problems of their respective countries. Among the English guests were Mr. Ebenezer Howard, the founder of Garden Cities and President of the Association; Mr. Montagu Harris, Chairman of the Association; Mr. Thomas Adams, of the Local Government Board; Professor Adshead, Mr. Raymond Unwin, and Councillors Carby Hall and William Green, respectively Chairman and Deputy-Chairman of the Development Committee, Leeds. The company, which included several ladies, were received by Mr. Ernest Newton, A.R.A., President R.I.B.A., and Mrs. Newton, supported by the Vice-Presidents and members of the Council and by members of the R.I.B.A. Town Planning Committee. A collection of maps, plans, and drawings illustrative of the objects the Association was formed to advance were exhibited in the Great Gallery.

Continental Town Planning Tour.

During the past six years annual visits have been arranged by the National Housing and Town Planning Council to study the best examples of Continental Town Planning. The cities to be visited this year will include Prague, Buda Pesth, Vienna and Leipsic, and every facility is to be given for the study of the town planning work accomplished by the various municipal councils. The visit has been timed for September on the advice of Dr. Harrer, Chief of the Town Planning Department of Buda Pesth. The weather at that time is generally good and the heat not too great.

The object of the Council in arranging this series of visits is to provide municipal councillors and officers, and others specially interested, with an opportunity for the definite study of the methods of housing and town planning adopted in other countries. Membership will therefore be limited to municipal representatives (councillors and officers), architects and surveyors, and members of the National Housing and Town Planning Council. (As in earlier years, ladies will be welcome as members of the party.) Explanations of the special features

of each town will be given by experts. An endeavour will be also made to secure the voluntary help of English-speaking guides in each city visited.

The party will leave London on Saturday, August 29th, reaching Berlin the following afternoon. Prague and Buda Pesth will be visited in the first week, and Vienna and Leipsic in the second week. The return journey will be made by the Hook of Holland route on Saturday, September 12th, reaching London on Sunday, September 13th. Full particulars may be obtained from Mr. Henry R. Aldridge, Secretary, National Housing and Town Planning Council, 41, Russell Square, London, W.C.

Publisher's Announcement.

Messrs. Batsford announce for publication in the autumn three important and very fully illustrated volumes, in their "Library of Decorative Art," on Decoration in England from 1660 to 1770; Furniture in England during the same period; and Tapestry Weaving from the earliest times to the Eighteenth Century. The books are being offered to subscribers under special conditions.

Death of Mr. Dare Clapham.

We deeply regret to announce the decease, at the age of forty-one, of Mr. Frederick Dare Clapham (*Associate*, 1901; *Fellow*, 1909). Mr. Clapham was knocked down by a motor-car on the 17th inst. and so severely injured that he succumbed almost immediately. A notice of his career is in preparation and will appear in the next issue of the JOURNAL.

COMPETITIONS.

Australia's Federal Parliament House.

The Australian Government announces an international architectural competition for the purpose of selecting the architect of the Parliament House, and possibly, incidentally, an additional architect for other Government structures of the new Federal Capital City, Canberra.

Only tentative outline sketch designs for the building are requested, and eight prizes are offered, aggregating £6,000, the first being £2,000, in addition to commission for service on the scale of the Royal Institute of British Architects.

The designs may be submitted in either Melbourne or London by the end of March, and will be judged by the following jury of architects, whose decision will be final: Mr. George T. Poole (Australia), Sir John J. Burnet (London), MM. Victor Laloux (Paris), Otto Wagner (Vienna), Louis H. Sullivan (Chicago).

The programme will be issued to any practising architect on application to the High Commissioner for Australia in London, or any British Ambassador to whom copies are being forwarded.

The promoters state that the importance of this event is not to be measured by that of the foremost building of the Commonwealth, but by the opportunity to establish an architectural standard, not only for the future seat of Government in Australia, but for a great new Democracy of scope, scale and modern advantages, as well as of climatic conditions, differing radically from any prototype in Europe or elsewhere.

Shakespeare Memorial National Theatre.

The Shakespeare Memorial Committee is instituting a competition for designs for the erection of the theatre, and as a preliminary step it invites architects to submit photographs or drawings of important buildings they have erected or designed, with a view to the selection of six architects, who will be invited to enter the competition.

The Committee reserves the right to add two names to the number of architects so selected, and has appointed Mr. T. E. Colcutt, Past President R.I.B.A., to act as Assessor for the competition, to draw up the conditions and instructions, and to select six designs.

The authors of five such selected designs will each receive a premium of 150 guineas, and the author of the design placed first by the Assessor, will receive a premium of 500 guineas, to be merged in the remuneration payable to him on the preparation of the contract drawings. Such remuneration will be as provided in the Schedule of Charges for professional practice as sanctioned by the Royal Institute of British Architects.

Preliminary conditions of the competition may be obtained on application to the Secretary, the Shakespeare Memorial Committee, 3A Dean's Yard, Westminster Abbey, London, S.W., to whom drawings and photographs must be sent on or before 15th September 1914.

New School, Sunderland Road, Gateshead.

Members and Licentiates are advised that the conditions of this competition are not in accordance with the Institute Regulations for Architectural Competitions, and the Competitions Committee are in correspondence with the promoters with a view to getting them amended.

IAN MACALISTER, *Secretary*.

Errata.

M. Pascal calls attention to a regrettable omission in the inscription to the illustration of the Monument to Regnault in the Ecole des Beaux-Arts, given as one of the works of M. Pascal in the JOURNAL for 23rd June, p. 538. The monument, it should have been stated, was designed by M. Pascal in collaboration with M. Coquart.

Mr. E. R. Douglas Selway, *Associate*, who was awarded the third premium in the St. Paul's Bridge Competition, was wrongly described as *Licentiate* in the last issue, p. 552.

THE EXAMINATIONS.

Preliminary.

The Preliminary Examination, qualifying for registration as Probationer R.I.B.A., was held in London and the under-mentioned provincial cities on the 16th and 17th June. Of the 150 candidates admitted, 41 were exempted from sitting, and the remaining 109 examined, with the following results:—

Centre	Examined	Passed	Relegated
London	53	40	13
Birmingham	8	6	2
Bristol	7	7	—
Cardiff	4	3	1
Dublin	2	2	—
Glasgow	3	2	1
Leeds	10	8	2
Liverpool	4	4	—
Manchester	11	8	3
Newcastle	7	7	—
	109	87	22

The passed and exempted candidates, totalling 128 altogether, are as follows:—

- ABBOTT: Cyril Edward; The Austins, Handsworth, Birmingham.
- APPLETON: Gilbert Leonard; Hayes, Paignton, S. Devon.
- ARMSTRONG: Douglas Gordon; 38 New Square, Cambridge.
- ASSER: Harold Edward; 5 Waldemar Avenue, Ealing, W.
- BADEN: Morris; 24 St. Thomas' Road, Hackney, N.E.
- BARTON: Walter; 127 Plough Road, Clapham Junction, S.W.
- BEARLEY: Albert; 1 Sandringham Road, Sneyton, Nottingham.
- BENTLEY: Clayton Moffat; 53 Church Street, Whitehaven.
- BLAKELEY: Tom; 47 Thornton Road, Stanwix, Carlisle.
- BOULTON: Howard Gilbert; Amblecote Hall, Stourbridge.
- BOWEN: Leslie John; Mudford Manor House, Yeovil.
- BRAO: Eric Wensley; 64 Auckland Road, Upper Norwood, S.E.
- BROOKE: Faith; Barford Rectory, Warwick.
- BROWN: Frank Collin; 58 Aglionby Street, Carlisle.
- BURGE: Bruce; c/o H. Wild, Esq., Harraby Mount, Berlin Terrace, Carlisle.
- BURR: Alfred Vincent Putney; 85 Gower Street, W.C.
- CALE: William Frederick; 8 Boreford Road, East Finchley, N.
- CARMICHAEL: David Arthur; Netherton, Greenock, N.B.
- CARNALL: Ronald Gundry; Lescrow House, Fowey, Cornwall.
- CHALLEN: Harold Bertram; 6 Dalby Villas, Lansdowne Road, Tottenham.
- CHESLER: George Stanley; "Sandford," Luton Avenue, Broadstairs.
- CHEVALIER: Benjamin Bernard; 24 Compton Road, Canonbury, N.
- CLARK: Lionel Clement Erskine; 44 Berkeley Square, W.
- CLARKE: Henry Frederick; "Inversnaid," Avenue Road, Doncaster.
- COLLINS: John James; 27 Arbour Square, Commercial Road, Stepney, E.
- COMMER: Ernest; 57 rue de Lille, Paris, France.
- CULLEN: Alexander; 14 Hamilton Park Terrace, Glasgow, W.
- CURRIE: Murdoch; 250 Paisley Road West, Glasgow.
- DAVIDSON: Arthur Edwin; "Wood-Side," Queen's Park, St. Helens, Lancs.
- DANIEL: John; "Ash Grove," Church Road, Bridgend, Glam.
- DEFEUDOR: John Alfred; Whitecomb Lodge, Wellington Road S., Hounslow.
- DOLMAN: Horace George; Oak Villa, Oak Road, Richmond Park, Bournemouth.
- DOWSETT: Thomas William; 61 Chancery Lane, W.C.

- DUNKERLEY: Robert Bancroft; 75 Queen's Road, Alexandra Park, Oldham.
- DURANT: Nicholas John; Ystrad Terrace, Gowerton, Glam.
- EARLE: Leslie Marriott; 1 Ardbeg Road, Herne Hill, S.E.
- EASTMAN: Ralph Victor; 42 Portsmouth Road, Woolton, Southampton.
- EBERLIN: Albert Edgar; 16 Park Terrace, Nottingham.
- EDWARDS: Harold William; "Gwendraeth," 165 King's Road, Kingston-on-Thames.
- EVANS: Thomas John; Tymaen, Porthcawl.
- EVANS: William Cecil; 3 Courtland Place, Port Talbot, Glam.
- FELGATE: Eric George; 8 Castlegate, York.
- FOSTER: Alfred Stockley; 31 North Villas, Camden Square, Camden Town, N.W.
- FOX: Albert Robert; 7 Darnley Road, Holland Park, W.
- GRIFFITHS: Harold; 5 Hamilton Square, Birkenhead.
- GRUMMANT: Reginald Thomas; 27 Raul Road, Hanover Park, Peckham, S.E.
- HALLIDAY: Franklyn Leslie; Holly House, Bramhall Lane, Davenport, Stockport.
- HANSON: Charles Kendall; The Gables, Ossett, Yorks.
- HARRISON: Frederick Claude Smith; 28 South Street, Hamsteads, co. Durham.
- HAUGHAN: John Holliday; 3 Lyon Road, Sillioth, via Carlisle.
- HEATH: Edward Taylor; 136A Westgate, Wakefield.
- HILL: Mark Oliver; Farm, Fiddington, Bridgwater, Somerset.
- HIGGINS: Percival Theodore; "Viewfield House," 30 Pasley Street, Davenport.
- HOLMAN: Clifford Evans; "Woodside," Buckhurst Hill, Essex.
- HOLT: Felix; 15 Hamilton Road, New Brighton, Wallasey, Cheshire.
- HOUGH: Topham Becher Dabridgecourt; 65 Tennyson Avenue, Bridlington, Yorks.
- HOUSTON: James; Glenlogan, Kilbirnie, Ayrshire.
- HOWARD: Cyril Ewart; 81 High Street, Chesham, Bucks.
- HUNKIN: William Burrows Clement; Cae-Rhya-Ddu, Neath, Glam.
- HUNT: Noriban Stuart; 17 Vicarage Gate, Kensington, W.
- JACKMAN: Harry; 11 Delph Mount, Leeds.
- JACKSON: Harold Thomas; Rossley Manor Farm, Andoversford, Glos.
- JAMES: Francis Raymond; Holly Cottage, Uckfield, Sussex.
- JAMES: William Peterson; 27 Nimrod Road, Streatham, S.W.
- JEFFERIES: Frank Edward; 53 Norfolk Road, Dalston, N.E.
- JONES: Harold; School House, Wingrave, Aylesbury, Bucks.
- KERR: Hume Victor; 184 Willesden Lane, Brondesbury, N.W.
- KIRALFY: Edgar Graham; 31 Riverview Gardens, Barnes, S.W.
- KNOTT: Albert Leslie; 1 St. Gabriel's Road, Cricklewood, N.W.
- LANGLEY: Frank Henry; Dudley House, Belvoir Drive, Aylestone, Leicester.
- LARKIN: Horatio Edward Arthur; 71 Peel Street, Kensington, W.
- LATIAN: Edgar George; 36 Kingsley Road, Palmers Green, N.
- LAVENDER: Edward Price; "Hughenden," Belvidere Road, Walsall.
- LEWIS: Alfred Drysdale; Westfield, Cotterill Road, Surbiton.
- LEWIS: Archibald Ernest; "Ingleside," 87 Royal Parade, Eastbourne.
- LEWIS: Henry Thelwell; 42 Grange Gardens, Cardiff, Glam.
- LYMAN: Charles Roy; Chancery Lane, Alsager, Stoke-on-Trent.
- LYNCH: Matthew J.; Lawnmoor Hill, Londonderry, Ireland.
- MARLEY: Richard James; 8 Stodart Road, Anerley, S.E.
- MEAD: Cyril Jack; 176 Berkhamstead Road, Chesham, Bucks.
- MEE: Clifford Edmund; 2 Osborne Road, Petersfield, Hants.
- MILLER: Bernard Alexander; Prenton Vicarage, Birkenhead.
- MORRIS: William; 2 St. Brendan's Road, Withington, Manchester.
- MULLETT: Harold Leggett; 22 Regent Street, Cambridge.
- NOKE: Cecil Jack; 68 James Street, Stoke-on-Trent.
- NUTT: Edward James; 57 Holgate Road, Nottingham.
- OWEN: Arthur Trevor; "Myrtle Bank," Magazine Promenade, New Brighton, Cheshire.
- PADETT: Montague William; 21 Park Square, Newport, Mon.
- PALLET: Edwin; c/o S. B. Russell, Esq., 11 Gray's Inn Square, W.C.
- PARROTT: Denis Hale; Shipton House, Kidlington, Oxfordshire.
- PAULDEN: William; 18 Burn Avenue, Forest Hall, Northumberland.
- PHILIPS: Leslie Frederick; Woodville, Belgrave Road, Gloucester.
- PHILLIPS: Edwin; 87 Victoria Avenue, York Road, Leeds.
- PICKFORD: Aston Charles; 108 Fernside Road, Wandsworth Common, S.W.
- PITCHER: Douglas Horace Selim; 44 Fildes Street, Grimsby.
- POTTER: Edward James; St. Joseph's College, Ballinasloe, co. Galway.
- PYPER: John William Anderson; Lacock Vicarage, Chippenham.
- REDFERN: James; 66 Clowes Street, West Gorton, Manchester.
- REEVES: Stanley; 32 Fawe Park Road, Putney, S.W.
- REIXA Y GARCIA DEL BUSTO: Frederico; Architectural Association, 18 Tufton Street, Westminster, S.W.
- REYNOLDS: John Eric; 39 Speldhurst Road, Bedford Park, W.
- ROBERTSON: Charles William Victor; Durham Lodge, Howard Drive, Hale, Cheshire.
- ROSEVEAR: Ronald Chard; 11 Stafford Terrace, Plymouth.
- ST. LEGER: Charles Douglas; 27 Canfield Gardens, S. Hampstead, N.W.
- SENEVIER: Bernard Cecil; 34 Oppidans Road, Primrose Hill, N.W.
- SEYFARTH: Leonard; 64 Geraldine Road, Wandsworth, S.W.
- SHANNON: William Arthur; 61 Hollers Hill, Bexhill-on-Sea, Sussex.
- SIMPSON: Archibald Arthur; 144 Birchfield Road, Handsworth, Birmingham.
- SKIPPER: Eric Hayward; "Sutton Lodge," Ipswich Road, Norwich.
- SLOOT: Lambertus Louis Theodor; 115 Greencroft Gardens, West Hampstead, N.W.
- SMITH: Alfred Ewart; 48 Tyndale Street, Leicester.
- SMITH: Ernest Morris; 37 Eastborough, Scarborough.
- STERN: Thomas; 8 Holmston Road, Ayr, Scotland.
- STEELE: Harold Rooksby; 83 Victoria Street, Westminster, S.W.
- STREETFIELD: Ernest Albert; 2 Eton Villas, Elm Grove Road, Weybridge, Surrey.
- TEASDALE: John Stuart; Church Road, Charlwood, Surrey.
- THOMAS: John; Crofton House, Crofton Park, Yeovil, Somerset.
- THOMPSON: Harold Warwick; 141 Lambert Road, Grimsby.
- TWISS: Wilfred; South View, Ash Lane, Hough Green, near Widnes, Lancs.
- WATERHOUSE: Michael Theodore, B.A. Oxon; Green End, Boxmoor, Herts.
- WEBB: Francis Howard Hipperley; 62 Cold Harbour Road, Redland, Bristol.
- WHEATLEY: Harold Remington; School House, Sandbach, Cheshire.
- WILKINS: Guy Charlton; 58 Penhurst Road, Thornton Heath, Surrey.
- WILLIAMS: Harold Douglas; "Ivel," Glebe Avenue, Kettering.
- WILLIAMS: Herbert Trevor Bailey; 1 Glanffrwd, Llanfair-tydehan, N. Wales.
- WILSON: Arthur; 16 Fox Houses Road, Whitehaven.
- WILSON: Harry Ernest; 10 Lordship Park, N.
- WOOD: Harry Wilson; "Brankssea," Grove Hill Road, Handsworth, Birmingham.

Intermediate.

The Intermediate Examination, qualifying for registration as Student R.I.B.A., was held in London and the under-mentioned provincial cities from the 12th to the 19th June. Eighty-one candidates were examined, with the following results:—

Centre	Number Examined	Passed	Relegated
London	47	27	20
Belfast	3	2	1
Bristol	3	3	—
Cardiff	5	3	2
Dublin	2	—	2
Glasgow	3	2	1
Leeds	3	2	1
Liverpool	3	3	—
Manchester	11	4	7
Newcastle	1	1	—
	81	47	34

The passed candidates are as follows, the names being given in order of merit as placed by the Board:—

[P.=Probationer.]

HARRISON: Austin St. B. [P. 1913]; School of Architecture, London University, Gower Street, W.C.
 BAYSON: Thomas [P. 1923]; 23 Stanley Road, Oxford.
 CASBROBE: Francis Milton [P. 1909]; 26 England Lane, Hampstead, N.W.
 KEEP: Norman Price [P. 1912]; 15 Belleville Road, Wandsworth Common, S.W.
 WATT: William James [P. 1913]; Whitehillock, Cairney, Keith, N.B.
 JONES: Neville Wynne [P. 1910]; 17 Woodlands Terrace, Swansea.
 NORRIS: Leslie Archibald [P. 1910]; "Glevum," 18 Allfarthing Lane, Wandsworth, S.W.
 GOSTLAND: Wilfrid Bernard [P. 1911]; 24 Ferme Park Mansions, Stroud Green, N.
 TUNNARD: Henry Bartholomew [P. 1911]; 156 Denmark Hill, S.E.
 SHIBER: George Saba [P. 1913]; 28 Prince's Square, Queen's Road, W.
 BERT: John James Douglas [P. 1908]; 22 Caprera Terrace, Plymouth.
 FOSTER: Leonard [P. 1912]; 6 Mexborough Street, Chapel-town Road, Leeds.
 SHEARER: Thomas Smith [P. 1913]; 75 Limerston Street, Chelsea, S.W.
 BLAKE: James Robert [P. 1912]; The Lees, Malvern.
 HARRIS: Wilfred Henry [P. 1911]; 33 Sydnor Road, Stoke Newington, N.
 BRIDGE: Thomas Moss [P. 1912]; 31 Park Road, Walkden, nr. Manchester.
 GORDON: Joseph Davson [P. 1912]; Conway Square, Newtownards, co. Down.
 LYNE: Edgar, Jr. [P. 1913]; Oakdale, 20 Christchurch Road, Streatham Hill, S.W.
 McLEAN: James Monticith [P. 1912]; 2 Alexandria Place, Paisley, Scotland.
 WERN: John Adams [P. 1910]; Burton Hill, Melton Mowbray.
 BLACKBURN: Norman Arthur [P. 1910]; 164 Bradford Road, Dewsbury.
 KEYTE: Joseph Rushbrooke [P. 1910]; 81 Woodstock Road, Moseley, Birmingham.
 SPURWAY: George Vyvyan [P. 1912]; 3 St. Andrews Road, Rowbarton, Taunton.
 TURNER: Frederick Wentworth [P. 1913]; 26 Wendover Road, Aylesbury, Bucks.
 LEWIS: Harold Morgan [P. 1912]; Sunnyside, Pontypridd, Glam.

THOMSON: John Stewart [P. 1911]; 12 Salisbury Road, Wimbledon, S.W.
 NEWLY: Richard Ross [P. 1913]; 115 Fitzroy Avenue, Belfast.
 BRYAN: George, Jr. [P. 1910]; Bryn Onen, Bridgend, Glam.
 HARRISON: Harry St. John [P. 1911]; 102 Holly Avenue, Jesmond, Newcastle-upon-Tyne.
 MAY: Thomas William Vivian [P. 1912]; 24 Gladwell Road, Crouch End, N.
 BEAVERSTOCK: Horace [P. 1911]; Beech Dene, Newstead Grove, Nottingham.
 MEREDITH: John Nelson [P. 1911]; Loggerheads, Mold, N. Wales.
 CAREY: Reuben Walter [P. 1908]; 28 Quadrant Road, Canonbury, N.
 GOODER: Francis Eric [P. 1912]; 33 Torrington Square, W.C.
 HEYWOOD: Leonard [P. 1911]; 591 Chorley Old Road, Smithills, Bolton.
 HINTOS: Charles Allen [P. 1910]; Ribblesford, Scotforth, Lancaster.
 KEY: William Donald [P. 1912]; Glen Caladh, Upminster, Essex.
 McBEATH: John Gordon [P. 1911]; Birnam House, Marlborough Road, Sale.
 PITE: Ion Beresford [P. 1912]; 21 Willow Road, Hamstead, N.W.
 POPE: Clement Lawrence [P. 1909]; "Sunny Brae," Moorside Road, West Moors, Dorset.
 PRESTON: William Carter [P. 1910]; The Fold, Far Sawrey, Windermere.
 ROLLIS: Percy William [P. 1903]; 16 Crowhurst Road, S.W.
 SACKS: Lester Howard [P. 1911]; East Hanningfield, Chelmsford.
 SLATER: Norman Woodford [P. 1909]; Knutton Road, Woolstanton, Staffs.
 STRICKLAND: Harley Clarence Victor [P. 1905]; 65 Ringmer Avenue, Fulham, S.W.
 TANNER: Albert Stringer [P. 1897]; 3 Ridgmount Gardens, Chancery Street, W.C.
 WALCH: James Bernard Millard [P. 1908]; 28 Pickwick Road, Dulwich Village, S.E.

The number of failures among the relegated candidates in each subject of the Intermediate Examination was as follows:—

A. Principal Styles and General History of Architecture	5
B. 1. Simple Applied Construction	18
B. 2. Theoretical Construction	14
C. 1. Historical Architecture:—	
(a) Greek and Roman	1
(b) Byzantine and Romanesque	—
(c) French and English Gothic	3
(d) Italian, French, and English Renaissance	1
C. 2. Mathematics and Mechanics	—
C. 3. Design	22

Exemptions from the Intermediate.

The following Probationers possessing the certificates required under the regulations were exempted from the Intermediate Examination, and have been registered as Students, viz.:—

ARCHER: Howard Dennis [P. 1909]; Ingram House, Stockwell, S.W. [Architectural Association School of Architecture.]
 BRADDOCK: Thomas [P. 1904]; 176 Kingston Road, Merton, S.W. [Architectural Association School of Architecture.]
 CARMICHAEL: David Arthur [P. 1914]; Netherton, Greenock. [Glasgow School of Architecture.]
 COLE: Edward Robinson Ferdinando [P. 1912]; 83 Bankhall Street, Bootle, Liverpool. [Liverpool University School of Architecture.]
 CORMIER: Ernest [P. 1914]; 57 Rue de Lille, Paris. [Ecole des Beaux-Arts, Paris.]

DAVIDSON: Arthur Edwin [P. 1914]; Wood-Side, Queen's Park, St. Helen's. [Liverpool University School of Architecture.]
 DICKSEE: Harold John Hugh [P. 1910]; Brendon Lodge, Lyndale, Child's Hill, N.W. [Architectural Association School of Architecture.]
 DOWSETT: Thomas William [P. 1914]; 61 Chancery Lane, W.C. [Architectural Association School of Architecture.]
 HARKNESS: William [P. 1910]; Ingram House, Stockwell, S.W. [Architectural Association School of Architecture.]
 MILLER: Bernard Alexander [P. 1914]; Prenton Vicarage, Birkenhead. [Liverpool University School of Architecture.]
 THREADGOLD: Robert Ainslie [P. 1910]; 107 Hall Lane, Liverpool, E. [Liverpool University School of Architecture.]
 WILSON: Arthur [P. 1914]; 16 Fox Houses Road, Whitehaven. [Liverpool University School of Architecture.]

Final and Special.

The Final and Special Examinations, qualifying for candidature as Associate R.I.B.A., were held in London from the 25th June to the 3rd July. Of the 91 candidates examined, 45 passed, and the remaining 46 were relegated. The successful candidates, given in alphabetical order, were as follows:—

S = Student R.I.B.A.

ANDERTON: Richard [S. 1910]; Breeze Hill, Cadley, Preston, Lancs.
 BAIDER: Richard Alfred [S. 1910]; 110 Kenilworth Avenue, Wimbledon, S.W.
 BRYANT: Herbert Phillips [S. 1910]; Ikley, 27 Hill Lane, Southampton.
 BURNETT: Andrew Stuart [S. 1911]; Shawford Down, Hampshire.
 CALLENDER: George Wilfred [S. 1913]; c/o Bank of New Zealand, 1 Que n Victoria Street, E.C.
 CAMERON: Kenneth [S. 1903]; 62 Queenway, Wallasey, Cheshire.
 CLARK: Walter Llewellyn [S. 1910]; 15 Grosvenor Road, Westminster, S.W.
 COCKNEY: Harold Thoresby [S. 1912]; 266 Upper Street, Islington, N.
 DICKSON: Colin Addison [Special]; 8 Meeklenburgh Street, W.C.
 EBS: Edward Harold Montague [S. 1911]; 11 Greenhill Road, Harlesden, N.W.
 FOWELL: Joseph Charles [S. 1910]; 55 Bridge Road, Hammersmith, W.
 GODWIN: William Hubert [S. 1911]; Bowdley, Worcester-shire.
 HARRISON: William Holgate [S. 1910]; Avenue House, Whalley, Lancashire.
 HEADNE: Frank [Special]; 23 Prudential Buildings, Union Street, Oldham.
 HEMBROW: James [Special]; Addison House, Fore Street, Edmonton.
 HICKMAN: Ernest James [S. 1911]; 101 Kingswood Road, Moseley, Birmingham.
 HOWARD: Percy [S. 1909]; 88 Mosley Street, Manchester.
 HUGHES: Basil, P.A.S.I. [S. 1910]; 43 Chancery Lane, W.C.
 ISAAC: William John [S. 1907]; 72 Bewsey Street, Warrington.
 JARRETT: Eric Rawlstone [S. 1908]; 7 Wilson Road, West-cliff-on-Sea.
 JESSOP: Bernard [S. 1911]; Bank Cottage, Kimberley, Nottinghamshire.
 KALENBACH: Albert Frederick [S. 1912]; "Hillside Lawn," 70 Hornsey Lane, N.
 KRECKENBERG: Frederick Lawrence [S. 1910]; Dunsforth Vicarage, York.
 LEDGER: Godfrey Horton [S. 1911]; Grove Lodge, Epsom, Surrey.

LEECH: William Leonard Boghurst [S. 1909]; 28 Egerton Gardens, West Ealing, W.
 MACGREGOR: James [S. 1910]; Carmenia, North End Road, Golder's Green, N.W.
 MACRAE: Ebenezer James [Special]; 17 Braiddurn Crescent, Edinburgh.
 MARTYN: Egerton Alwyn Lawer [S. 1912]; Brynhyfryd, Albany Road, Redruth, Cornwall.
 MILLER: Stanley Russell [S. 1909]; 112 Avenue Road, Acton, W.
 PIERMAHOMED: Abdulla Bhangi [S. 1912]; 45 Broudesbury Villas, Kilburn, N.W.
 PERKINS: Thomas Luff [Special]; 3 Melrose Place, Clifton, Bristol.
 PHILP: Richard Manning Raig [S. 1913]; London Bank of Australia, Ltd., 71 Old Broad Street, E.C.
 RIDLEY: Geoffrey William [S. 1909]; St. Wilfrids, East Grinstead, Sussex.
 RIPLEY: Cedric Gurney [S. 1912]; 19 Victoria Square, S.W.
 ROLLEY: Horace Edwin [Special]; 16 Hobury Street, Chelsea, S.W.
 SILCOCK: Arnold [S. 1911]; 26 Green Park, Bath.
 STAFFORD: Charles Ernest [Special]; Municipal Offices, Babington Lane, Derby.
 STANLEY: Gerald [Special]; Boyton, Trowbridge, Wilts.
 TAYLOR: Herbert Samuel [S. 1910]; "Brook Farm," Great Staughton, St. Neots, Hunts.
 THOMPSON: James Osbert [S. 1912]; 135 Blair Athol Road, Sheffield.
 TYTE: Gilbert George Lee [S. 1910]; 6 Heathcote Street, Meeklenburg Square, W.C.
 WADDINGTON: Harold Gerard [S. 1910]; 174 Albemarle Street, Ashton-under-Lyne.
 WARE: Percival Mitchell [S. 1913]; 15 King's Place, Baker Street, W.
 WHITELEY: Charles Taylor [S. 1907]; 10 Hall Royd, Shipley, Yorks.
 WOOD: Arthur Jackson [S. 1913]; 54 St. Nicholas Street, Leicester.

The number of failures among the relegated candidates in each subject of the Final Examination was as follows:—

A. Design	
B. Construction—	
(1) Foundations, Walls, Roofs, &c.	27
(2) Iron and Steel	35
C. Hygiene	21
D. Properties and Uses of Building Materials	11
E. The Ordinary Practice of Architecture	20
F. The Thesis	2

The Final Examination: Distinction in Thesis.

Every candidate for the Final Examination is required to submit among his Testimonies of Study a thesis showing advanced and individual work in one only of the following subjects:—

(1) HISTORICAL ARCHITECTURE—implying as far as possible the direct study of actual historical buildings.

(2) SCIENCE, AS APPLIED TO BUILDING—a special study of an application of science to definite problems of building.

(3) DESIGN INCLUDING DECORATION—such as a study in Civic Monumental, Decorative, or other branch of Architectural Design.

The Regulations provide that the subject selected for the thesis must be notified for the approval of the Board of Architectural Education four months

before the date of the examination, and the thesis itself must be submitted four weeks before that date. The thesis, which may be either an illustrated essay or a design with a detailed report, is assessed by Examiners specially appointed for the purpose, who also examine the candidate orally in his thesis. It is open to candidates to obtain distinction in the advanced work, and a distinguishing mark will be placed against their names in the KALENDAR.

Since this regulation came into force the following candidates have obtained distinction in their theses on the subjects indicated below :

December 1912.

NEWTON, William Godfrey [A.] : "The Contribution of Imperial Rome to Architectural Development."

THOMS, William George [A.] : Working Drawings of a Factory, with all construction and details fully worked out, stress diagrams and calculations, and a detailed and comprehensive report thereon.

June 1913.

HILL, Joseph [A.] : "The Gothic Towers of England."

NIMMO, William Wilson [A.] : "The Mediæval Spires of England, their Design and Construction."

December 1913.

FRISKIN, William Wallace [A.] : "The Problem of Reverberation in Buildings."

GIBBS, Harry Beckett Swift [A.] : "The Life and Work of James Gibbs, Architect."

LEIGHFOX, Henry Birkett [A.] : "Electricity and its Application to Buildings."

PATERSON, William [A.] : "The Growth and Development of the Mediæval House."

June 1914.

THOMPSON, James Osbert : "Elementary Education and Physical Culture."

MINUTES. XVII.

At a Special General Meeting (adjourned from the 8th June) held Monday, 29th June 1914, at 8 p.m.—Present : Mr. Reginald Blomfield, R.A., *President*, in the Chair; 96 Fellows (including 24 members of the Council), 171 Associates (including 3 members of the Council), and other members who failed to sign the attendance book—the Minutes of the Meeting held on the 8th June having been published in the JOURNAL were taken as read and signed as correct.

The following members attending for the first time since their election were formally admitted by the President—viz., Guy Church, *Fellow*; Arthur Bedford Knapp-Fisher and Ralph Henry Dewhurst, *Associates*.

On the motion of Mr. Ernest Newton, A.R.A., *President elect*, seconded by Sir Aston Webb, C.B., K.C.V.O., R.A., *Past President*, a vote of thanks was passed by acclamation to Mr. Blomfield for his eminent services to the Institute during his two years' term as President.

The Meeting then resumed consideration of the Council's proposals for a new Charter and By-laws providing for the Registration of Architects, beginning with the amendment moved at the previous Meeting by Mr. Sydney Perks, F.S.A. [F.]—viz., "That Clause 10 be referred back to the Council for further consideration, a revised clause to be submitted to the General Body at an early date—it being distinctly understood that the members of Allied Societies are not to have larger representation on our Council than our own Associates."

The amendment having been spoken against by various

Presidents of Allied Societies and other members, and Mr. Sydney Perks having replied, the amendment was put from the Chair and lost—84 voting in its favour, 153 against.

Mr. Herbert A. Welch [A.] asked if it was in order for a circular letter to be sent out officially from the offices of the Institute to a certain section only of its members requesting them to make a special effort to be present that evening.

The President in reply read By-law 39, and stated that two circular letters had been sent out by his instructions and the fact duly reported to the Council; that his action was constitutional and in order, being dictated in the belief that an occasion had arisen for the exercise of the power which By-law 39 confers upon the President.

Mr. S. Douglas Topley [A.] moved "That Clause 10 be referred back to the Council for further consideration, a revised clause to be submitted to the General Body at an early date—it being distinctly understood that the members of Allied Societies are not to have larger representation on the Council than our own Corporate Members."

The amendment having been seconded by Mr. Bruce J. Capell [A.] was put to the Meeting and negatived by a large majority.

Clause 10, as originally proposed [see footnote p. 603], was then put and carried—168 voting for, and 95 against.

Clause 8, proposed by Mr. C. Stanley Peach [F.], and seconded by Mr. A. W. S. Cross, *Vice-President*, was agreed to as revised by the Council—viz., "Representation on this Standing Committee and for the specific purposes only as defined in Clause 7 to be given to Licentiates and to Registered Architects not being Corporate Members or Licentiates. In all other regards the constitutional position of the Licentiates to remain as at present."

The revised Clause 9—viz., "The number of Members of this Standing Committee not to exceed 23, in the proportion of 10 Fellows, 7 Associates, and 6 Registered Architects, of whom at least 3 should be Licentiates, until such date as the class of Licentiates shall have expired"—was moved by Mr. C. Stanley Peach and seconded by Mr. E. Guy Dawber, *Hon. Secretary*.

Mr. Herbert Shepherd [A.] moved as an amendment "That Clause 9 be referred back to the Council for further consideration, and that a revised clause be submitted to the General Body, embodying the principle of proportional representation of the various classes of Registered Architects upon the Register, provided always that the high Chartered Officers of the Institute shall be members of the Board or Authority."

The amendment, seconded by Mr. S. Douglas Topley [A.], was put to the Meeting and lost—76 voting in favour, 160 against.

The original resolution was then put and carried.

Clauses 11, 12, and 13 [see page 604], having been duly seconded, were respectively put to the Meeting and agreed to.

Mr. Herbert A. Welch [A.], being called upon for the amendments of which he had given notice [see JOURNAL, 9th May, p. 430], stated that, as he did not consider the Meeting as called was competent to deal with the questions standing in his name, he withdrew his amendments.

Mr. Stanley Peach moved "That as the proposals have received the approval of members, the Solicitors to the Institute be instructed by the Council to prepare the necessary petition for submission to the Privy Council."

Mr. Herbert Shepherd, drawing attention to the fact that Clause 12 dealt with the property of the Institute, asked if it was not necessary under the Charter and By-laws to hold a confirmatory meeting.

The President stated that he was not prepared at the moment to give a decision upon that point.

In reply to Mr. Topley the President stated that the draft Petition would have to be confirmed when it came before the General Body in its final form.

Mr. Stanley Peach's motion, seconded by Mr. Ernest Newton, was then put to the Meeting and carried.

The proceedings closed and the Meeting separated at 10.15 p.m.



THE INFLUENCE ON ARCHITECTURE OF THE CONDITION OF THE WORKER.

By THOMAS SIMONS ATTLEE, M.A.Oxon. [A.], R.I.B.A. Essay Medallist 1914.

Essay awarded the R.I.B.A. Silver Medal and Twenty-five Guineas 1914, submitted under the motto "Per ardua ad astra."

IN this essay I wish to trace the condition of the worker as mirrored in the architecture of the past: I wish to examine how far the results that architects seek to achieve are conditioned by the capacity of the executants, and how far all those who are responsible for producing works of architecture—architects and executants alike—are dependent for their achievements (and not only for their achievements but for the aims which they seek to achieve), upon the social and industrial condition of the mass of their fellow-workers. The theme of the essay is, therefore, not simply the familiar controversy of "The Architect and the Craftsman," nor is it an attempt to deal only with the subject treated by Mr. March Phillipps in *The Works of Man*—the claim that architecture may be read as affording insight into the lives and characters of those by whom it was evolved. Rather is it an expansion of Professor Lethaby's pregnant phrase "Architecture is the matrix of civilisation." I wish to show that architecture is essentially a co-operative art, that it must express at any period the condition of the people as a whole—not merely the level of culture which its actual fashioners have reached: that the first essential of greatness in architecture is the welfare of the meanest members of the body which produces it.

The conditions governing this essay require that it shall be on a subject of architectural interest and that it shall make a useful contribution to knowledge by accurate research. I hope to show that the subject is not only of architectural interest, but is the subject of all others that architects must study if there is to be progress in our art, superseding or at least overshadowing all other studies.

As regards research, I have re-studied the history of Modern Europe, I have gathered such particulars of the condition of the workers in the ancient and modern state as I could from the various sources cited in the course of the essay, I have sought to illustrate my contentions from buildings observed during many visits to most of the countries of Europe. I must add, however, that I realise how much needs to be done in investigating the conditions of the working-class, the producers of architecture, in the past, how dependent the inquiry is upon the scanty generalisations of historians, and the need there is for patient research among the actual documents that remain.

At the outset it is necessary, I think, to draw a distinction, for the present purpose, between good architecture and great architecture. Good architecture may be defined as architecture which does not offend, which is sound in construction, suited to its function, satisfactory in mass, in outline, and in ornament, which does not excite or disturb—in a word adequate architecture. Great architecture it is

impossible to define. It was Nittleship, I think, who declared that great poetry takes one's breath away, thereby differentiating it from all other grades of achievements in poetry. The same test may be applied to architecture. Great architecture has all the qualities of good architecture, and also it takes one's breath away. It may be objected that this is in fact an arbitrary test—architecture may be great to one and not to another according to the disposition of the beholder. I believe, however, that the objection is valid only to a limited extent, as will appear in the course of the argument, and that the emotion that recognises the great work of art is universal. Great art is not the peculiar property of the connoisseur, it is the common possession of mankind. I wish to examine in the course of this essay the causes of this emotion of recognition, this gasp of realisation. I believe there are as regards architecture five causes, viz. : Impressive Size ; Daring Construction ; Memory ; Rhythm ; Humanity. These may be discussed most conveniently as they make themselves apparent in considering the different building epochs of the past. One may only add here that the emotion ultimately defies analysis—the quality that produces it in art or literature is, so to say, magic—outside our understanding, and one can only indicate what are really secondary causes.*

In order to confine this essay within reasonable limits I will examine only the architecture of Europe. Let us first consider Greek architecture. It is clear from the outset that, in the buildings of the great building age at Athens, we have architecture that is the product of a community that has reached a high level of culture. The characteristics of the temples are extreme refinement of line, delicately adjusted proportions, exquisite finish. The effect at which the builders were aiming, too, is unmistakably clear and definite. It was the product of citizens who formed a coherent body, bound together by common tradition, common aims. "In the golden age of Athens," says Mr. Warde Fowler, "the interests of the State and individual were more perfectly identified than in any other state of antiquity."† There is apparent a passion for perfection, and the ideal is achieved ; the buildings are perfect.

The limitations of Greek architecture, however, are as apparent as its achievements. It succeeds by limiting itself. It confines itself to the simplest possible methods of building, it settles upon its faultless ornament and repeats it again and again, it refuses to dare, it refuses to fail in part in order to gain in the whole, it cannot bear anything less than perfection ; and that very fact limits it more than a hundred faults and failures, for, as Ruskin pointed out, imperfection is essential to life, and to refuse to recognise the necessity of imperfection is to refuse to advance.‡

Now, in its defects no less than in its great qualities, the architecture of Athens reflects the condition of the Athenian State. The citizens of Athens reached a high level of culture and refinement, but they reached that level only through the oppression or degradation of others. The glory of Athens was made possible by the taxation of her subject states outside her borders, and the labour of the slaves within them. "Judged by the standard of the nineteenth century she was not really a democracy, but a slave-holding aristocracy."§ Mr. Warde Fowler estimates the number of slaves at 100,000 as against 135,000 free outlanders and citizens ; Professor Tucker puts the number at 300,000.

And this means that all their menial work and no doubt a great part of the work which is now done by what we call the industrial classes was done for the Athenians by persons who were in no sense members of the State, who had neither will nor status of their own, whose one duty in life was to obey the orders of their masters. The citizen of Athens had leisure to attend to his public duties, to educate himself for them, to enjoy himself at festivals and the theatre, chiefly because he had at home and in his workshop a sufficient number of slaves to carry on his affairs in his absence. It need hardly be said that from all such education, public business, and enjoyment the slave was most carefully excluded.¶

* . . . O delight
And triumph of the poet, who would say
A man's mere "yes," a woman's common "no,"
A little human hope of that or this,
And says the word so that it burns you through
With a special revelation, shakes the heart
Of all the men and women in the world,
As if one came back from the world and spoke

With eyes too happy, a familiar thing
Become divine in the utterance !

E. B. Br. writing, "Aurora Leigh," p. 23, *Canterbury Poets*.

† Warde Fowler, *The City State of the Greeks and Romans*, p. 171.

‡ Ruskin, *The Stones of Venice*, ch. 7, *Nature of Gothic*, I.
§ and ¶ Warde Fowler, *The City State of the Greeks and Romans*, p. 177.

Greek civilisation succeeded, as Greek architecture succeeded, by limiting its scope, by accepting restrictions. It restricted itself on the one hand to making good citizens of only a minority of the whole community, it restricted itself, on the other, to acquiring perfection in only the most limited types of buildings involving only the simplest forms; and it drew the means for carrying out its task, not from its own resources, but from the taxation of others, who had no share in its life.

Now it is exceedingly difficult to determine who, exactly, were the builders of the great Greek temples. Plutarch implies that they were free men, and Professor Tucker points out that manual labour was not confined to slaves, but that many free citizens would be found working at all kinds of menial occupations.* We know, however, that the Athenian citizens did despise manual work. They hated anything that would begrime or stunt them: in their independence, they hated working for anyone for pay.† In later times they tried in greater and greater numbers to become salaried, to live on payments from the State, to leave all hard and unpleasant work to others. We know, too, that architects and engineers were numbered among the slaves.‡ We can conclude, therefore, that the evidence of history goes to confirm the evidence of the great Greek buildings that they are essentially Slave architecture. That is to say, that there is as little as possible left to the individual initiative of the worker. The columns, entablatures, and steps, with their exquisitely finished surfaces, their faultless joints, their optical corrections calculated to a hair—all these demand patient, painstaking, skilful, above all, docile labour under unrelenting supervision and to exact instructions. The ornament, too, with its delicate curves and inevitable correctness of outline calls for no invention on the part of the executant, permits no variation from its beautiful precision, depends, in fact, for its whole success on the fidelity of the workman to the perfected pattern set before him. The least faltering or waywardness in execution and the effect is lost.

"A slave," says Aristotle, "is a live instrument of the higher intelligence."§ Greek architecture reflects both a high intelligence and an excellent instrument. The very fact, however, that it was the product of instruments, not of citizens, points to its fundamental defect. Architecture, as I hope to show, is essentially a co-operative art. In any building the result attained will be conditioned not less by the character of the workmen than by the capacity of the architect, and both workmen and architect are themselves dependent for their success or failure on the social and industrial condition of the community of which they form a part.

In Greek architecture, therefore, the form of the temples and their decoration was dictated ultimately by the capacity of the workman: those workmen were instruments carrying out the projects of those who used them, not co-operators contributing their quota to the design and execution of the work. It was limited to the forms those instruments could execute without imperfection. It is therefore essentially finished, complete architecture. It stands for an aim realised, it defines, it never hints; it implies satisfaction, not aspiration. Hence, to the modern mind, its complacency is its main defect. The Greek could contemplate slavery with equanimity—Aristotle can justify the institution without misgiving—he could accept it as the basis of his state, take it for granted even, and there is no trace in the splendid calm of his buildings of any disturbance of mind, any doubt of the adequacy of the scheme of the society which he held so dear. If, as it seems to us, he solved the problem by ignoring its main difficulties, he did so unconsciously.*

We to-day, however, can never recapture the Greek calm; we have, indeed, to put up with a

* Tucker, *Life in Ancient Athens*, p. 48.

† Aristotle, *Politics*, Bk. 1, ch. 13.

‡ It is important to emphasise the fact that the slave in Athens was not necessarily oppressed, hard driven, ill treated. Professor Tucker points out that he was as a rule well fed and housed, treated often rather as we treat an old family servant, certainly occupying a far better position than the Roman slave under the Empire or the modern slave in America. He had, however, no rights as a citizen, was shut out from all

that the Athenians considered as essential to the good life, and had in no sense any real freedom.—Tucker, *Life in Ancient Athens*, pp. 43, 44, 45.

§ Aristotle, *Politics*, Bk. 1, ch. 4.

|| Aristotle, *Ibid.*, chs. 4-8.

* One might perhaps trace a parallel between the Greek acceptance of the existence of slaves and the modern blindness to the disabilities of women.

scheme of things in which the great mass of our communities live in a worse state of slavery, subject to greater material misery than fell to the lot of the slave in ancient Greece, but we put up with it under protest, we burn to end the wrong, the most selfish are, at least, perturbed. We could none of us, even, like the men and women of the *Decamerone*, retire from the prevailing plague and, fancy free, isolate ourselves from the miseries of our fellows.

Hence Greek architecture fails, to the modern mind, in so far as it does fail, owing to the very quality which its creators most prized—its perfection. It satisfies, but it does not stimulate; it is stationary, not revolutionary. It is undeniably great architecture, however, and before passing on to the next great building epoch, it is necessary to determine why it is great, and whence comes the thrill that stamps it so. I think it comes partly from memory—from the men and the deeds and the literature that tells of them, from the whole Greek story that is so closely connected with them. Everyone knows the potency of this association of ideas with things and how it can over-ride a hundred considerations of form and disposition and ornament and disturb the coolest criticism. Ruskin has some of his finest and most convincing writing in the chapter on the Lamp of Memory in the *Seven Lamps of Architecture*.

And, secondly, Greek architecture has the quality of rhythm—the seemingly inevitable response of feature to feature, which affects the beholder like an air in music, so that he is tickled and excited unawares.

Finally, it has the magic of the South which is so intoxicating to a Northerner. The surprise of the brilliance of some of the buildings and the depth of tone of the sky—in contrast to the opposite conditions of the North; the sun that draws the shadows with a soft black pencil, as it were, instead of the hard triple H to which we are accustomed here; the whole fascination of the South which throughout our history is always luring the Northerner down, which becomes articulate in the writings of half our poets, which is so difficult to describe, but so undoubted and so powerful.* I conclude, then, that Greek architecture is great mainly through qualities which are independent of the individuality of the executant—rhythm, memory, the magic of the South. The effect of the condition of the worker is shown in its defects—for the worker was a slave.

Let us now consider Roman architecture at its highest development under the Emperors. We have to examine buildings which display as their most notable characteristics solidity in construction, impressive size, and a remarkable uniformity of style considering the exceedingly wide distribution of the buildings which remain to us. It is perhaps hardly necessary to cite examples illustrating these characteristics—the Pantheon and the Baths of Caracalla will at once occur to one as showing size and solidity, while the temples at Nîmes and Baalbec may serve as examples of the wide extent of the Roman world. Further characteristics are the elaboration of a system of construction in concrete—in walls, domes, and vaults (the particular contribution of Rome to the science of building)—a system of decoration applied to the construction but independent of it and inspired, not by the necessities of that construction, but by reverence for an earlier style—that of the Greeks—and an abundance of ornament of a uniform type but of no very great distinction in design or execution.

In investigating the conditions that were responsible for these characteristics of Roman architecture the great authority is M. Choisy, who, in his monumental work *L'Art de Bâtir chez les Romains*, has analysed very carefully the buildings and gathered a store of particulars of the conditions under which they were produced. Who were the men who produced the Roman buildings that have come down to us? Choisy shows how the buildings may be divided into two distinct parts—the carcass (of concrete) and the ornament applied to it, and that this division represented a division between two classes of workers.† The rough work of concrete—semi-skilled labour—would be performed by inferior work-

* Admirably analysed by "Vernon Lee," for instance, in *Linbo and The Enchanted Woods*.

† "N'avons nous pas reconnu que chaque partie de cette

gigantesque construction [the Coliseum] constituait un chantier à part; qu'il avait un atelier spécial et des ouvriers distincts pour construire le corps de murs et les pilastres qui

men, by slaves, by captives, or by freemen who were liable to the *corvée*—and these *corvées* became more and more oppressive as time went on—and, as Choisy points out, they fell upon a class that had been reduced by centuries of oppression to the position of a merely passive instrument in the hands of the central power.* Much work of this sort was performed also by the soldiers. It was considered dangerous to leave the legions in idleness—leisure too often meant revolts and tumults—and works were constantly ordered solely in order to keep an army occupied.† The carcasses of the buildings, therefore, were built of concrete, an easily manipulated material, by unskilled labour which was available everywhere to an almost unlimited extent.‡ The other part of the buildings, the decoration, was carried out by workmen or slaves of greater capacity, and the method of organising these workers and those also who were unskilled (exclusive of captives, soldiers, prisoners, and pressed men) deserves detailed examination.

In the very early times the workers of Rome formed themselves into free societies (analogous to the later guilds) which, in protecting the interests of their members, continually found themselves in conflict with the authorities. Slaves were admitted to these organisations, which took part in serious rebellions (such as that associated with Clodius), and were constantly suppressed by statute only to re-arise.§ Julius Caesar tried to destroy them, Trajan revived statutes suppressing them; Hadrian, however, initiated a new policy. He recognised officially the Societies (*Collegia*), became their patron, made them part of the machinery of the State, and so, at one stroke, got rid of a serious menace to the central authority and provided himself with an efficient instrument for carrying out his vast building enterprises. Men were now forced to join the *Collegia*, or were arbitrarily transferred from one to another; the remuneration of the different grades of workmen was fixed by the State—arbitrarily and unfairly; the workmen were organised in cohorts like an army; they were bound to unending servitude—their selves and their descendants—by the system of granting land to the *Collegia* as compensation for work done, which land, held as it was individually by the members (with the obligation of service), descended to the heirs of the workman when he died. The workman was thus thoroughly enslaved, whether nominally free or not.||

It is not necessary, perhaps, to dwell at length upon the Roman system of government. Its centralisation was its most striking feature,¶ and the great centralised organisation of Rome is stamped clearly on the architecture of the Empire. Its uniformity is due to the one central authority and to the one system by which, as Roman armies pushed further and further into foreign lands, they would raise, wherever they went, little Romes, not indeed identical, but all reproducing the same features, built by the same methods, embodying the same idea and by the hands of men organised from the one centre. It is official architecture, designed and carried out by officials. In its solidity of construction, its engineering adequacy, it typifies the eminently practical, rather oppressive, and inhuman strength of the Roman system in which the individual is submerged in the incoherent mass—is enslaved. In its decoration—a veneer of features derived from an earlier civilisation and misapplied, masking the real building—is reflected the artificial culture assumed by the wealthy and powerful classes in the Roman Empire.

"There is little doubt," says Professor Tucker, "that the Romans, if left to themselves, would have developed only the solid, or the gorgeous, or the baroque. . . . The Romans regarded a professional artist as only a tradesman . . . much of the work was done by slaves . . . in modern parlance, the Committees requiring some monument of art

les terminent : qu'une chaîne de pierres régulières, intercalée dans un mur d'appareil irrégulier ou de brique, était exécutée par des ouvriers différents de ceux qui travaillent aux remplissages ? . . . la séparation si nette établie par les Romains entre la structure et la forme est significative ; évidemment elle répond à une séparation de rôles bien tranchée entre les deux classes d'artisans qui se partageaient le soin de bâtir les édifices et de les orner."—Choisy, *L'art de bâtir chez les Romains*, p. 199.

* Choisy, *ibid.*, p. 210.

† Choisy, *ibid.*, p. 206.

‡ Labour on public works, for instance, was a common punishment.

§ Tucker, *Life in the Rome of Nero and St. Paul*, pp. 254, 255.

|| C'était, on le voit, une situation essentiellement dépendante. . . . De quelque côté qu'on l'envisage, la société romaine semble reposer tout entière sur un régime de servitude partiellement rachetée par des privilèges.—Choisy, *ibid.*, pp. 192, 193.

* See the younger Pliny's Letters for dependence of provinces on the central authority, even in detail, especially Letters 61 to 123.

'called for tenders' and were prone to accept the lowest. Whatever abundance of art the Roman world cultivated and possessed . . . it is very doubtful whether any large number of Romans entertained that spontaneous enjoyment of the beauty of art which is termed genuine artistic feeling. . . . In their literature we look in vain for any expression of enthusiasm on the subject. Enjoyment there was, but it was apparently for the most part the enjoyment of the collector or of the man who realises that an appreciation of art demands a large place in culture and who is determined to be as well supplied and as well informed as his neighbour.*

"Architecture depends on fitness and arrangement," says Vitruvius.† "It also depends on proportion, uniformity, consistency, and economy." That is the complete summing-up of architecture that can be made to order, the style that can be put down in black and white and controlled by rules.

How far is this Roman architecture great? Its claim must rest, I think, upon the impressive size of its buildings, the memories associated with them, the magic of the South—all characteristics which are independent of the condition of those who produced them. The influence of the condition of the worker on Roman architecture is shown in its defects—for the worker was a slave.

Let us pass on to the next great building epoch. With Byzantine architecture we encounter a revolution in the method of building and a definite breaking away from the conventions of the past, which requires consideration in considerable detail. We find the great constructional ideas initiated by the Romans—the dome, the vault, the concrete mass—developed and elaborated, and we find persisting too the method of applying rich and beautiful decorations to the rough and uncomely material of which the building was formed. But we find a notable difference in the nature of this decoration and in the method of its application. Whereas in the great Roman buildings the decorative forms evolved by the Greeks were applied illogically, masking the true construction, in Byzantine work the decoration is a garment of mosaic or marble fitting closely to the constructional forms, following faithfully the modellings of their surfaces, disguising nothing, but emphasising, rather, the features it adorns. Again, the column, which in those Roman buildings which, like the Coliseum, were original structures and not merely echoes of the Greek, was tending to become a decorative feature and to lose its functional significance, the column is in Byzantine work restored to its earlier uses, set to work again and made to bear its burden as a necessary member of the construction. It is no longer, however, to carry the lintol. The problem now was "to teach the column to support the arch."‡ We can see tentative essays towards a solution in the Palace of Diocletian at Spalato. The column carries the arch, but the traditional form of capital is still used, and almost without exception a slice of lintol intervenes between capital and arch. Tradition is still potent, the problem is faced but it is not solved. Further essays were made at Ravenna (San Giovanni in Fonte, built by Galla Placidia, and Sant' Apollinare Nuovo by Theodorice) and at Constantinople, culminating in the perfect types at Santa Sophia.

The constructional difficulty—that of fitting the solid at the springing of an arch on to a capital which, in the old form, *e.g.*, the Corinthian, was weak at the angles, was met partly by the expedient of the impost block—which, wide at the top, tapered at the base so as to transmit the load to the central part of the capital, partly by inventing capitals of an entirely new shape.

These capitals take the most varied forms, from the convex capitals, which seem to owe so little to their predecessors, to the concave, among which the Corinthian capital is recreated for new uses.§ Similarly, in the decoration of the wall surfaces, the utmost inventiveness is shown, and, while the traditional egg-and-tongue and acanthus reappear (but with their character changed), there are mingled with them forms which are as original as they are beautiful, and are derived only very indirectly from the inventions of the older builders.

The supreme achievement of Byzantine art is Santa Sophia, the greatest Byzantine building and the building in which the style reached its most complete development; for Justinian, by the most assiduous toil no less than by unexampled astuteness, succeeded in devising a system that held in

* Tucker, *Life in the Rome of Nero and St. Paul*, pp. 421, 422, 429.

† Vitruvius, Bk. 1, ch. 2.

‡ Freeman, *Historical Essays*, Series 1.

§ Texier and Pullan make the curious criticism (of the capitals of Santa Sophia) that, while beautifully executed, they "partook of the characters of all known orders, without possessing the elegance or precision of any one of them."

check for a time the forces of disintegration from within and of attack from without that threatened the Byzantine Empire. His reign is the culmination. On his death the process of dissolution begins, and the style declines with the fortunes of the Empire that created it. In the originality of its plan, the beauty of its ornament, the daring logic of its construction, Santa Sophia strikes a new note in the architecture of the ancient world. It is necessary to consider what causes operated to bring about this startling change in style.

The government of the Roman Empire under Justinian was an absolutism, but a precarious absolutism. Threatened from without by Avars and Slavs in the Balkans, by the Lombards in Italy, by constant danger from Persia and the East, there was always a tendency of the Border States, strengthened to resist the Barbarians, using that strength to dissociate themselves from the central authority. Within the turbulent population of the great city was always ready to disturb the system of government—to such an extent, indeed, that in the Nika riots it was touch-and-go whether Justinian should flee the city or remain; and only the remarkable courage and determination of Theodora saved the throne for the Emperor.

Lecky, in his well-known denunciation of the Byzantine Empire* ("the universal verdict of history is that it constitutes, with scarcely an exception, the most thoroughly base and despicable form that civilisation has yet assumed"), seems to have accepted Gibbon with all his anti-Catholic prejudices and his preferences for the bizarre, without question. Professor Oman† and Professor Bury‡ have criticised Lecky vigorously and effectively, and show that, granted the existence of Oriental vices and luxury natural in a city situated on the very border of the West, there is not, in fact, in the hostile pamphlets which form the basis of Gibbon's estimate, evidence of worse conditions than could be cited of any great town of ancient or modern times in similar literature. The important fact to remember, for the purpose of this essay, is that in Constantinople in the time of Justinian we find the beginnings of Freedom and of Association among the workers—words which give the key to the development of architecture for the next ten centuries. For Choisy points out that, while in Constantinople the Roman Collegia survived, they survived under changed conditions. In the West, as we have seen, the worker was tied to his organisation which was definitely under the central authority, a part of the State machinery. In the East, the statutes limiting and penalising the members of the collegia were abrogated. Further, Justinian's laws sanction immunities and privileges for the members. They are a protest against the Roman oppressive treatment of the worker. The Western Emperors tried to force the Greek to remain and work for them by legal constraint: the Eastern Emperors tried to encourage him to do so by granting him privileges.§ Work was still done by military labour, as under the Roman Emperors: the *corvées* also survived (though to a limited extent—Procopius does not mention one), but the fact that stands out especially in regard to the condition of the workers of the time is the freeing of their organisations from the direct control of the State and, in consequence, their growing power (as evidenced from time to time in the tumults in Constantinople and in the interesting evidence given by Professor Bury, of the right to petition the Emperor and state their case before him that was secured by the workers). Not only were the organisations becoming free from tyranny without, they became also more democratic within. The *συνεργασίαι* were associations of workers under an elected head. They were at once craft-guilds, religious confraternities and benefit societies,|| but the most notable fact about them is that not only the skilled trades were organised, not only the aristocracy of labour, but unskilled workers, labourers, and porters. Moreover, whereas in Roman times the principle of division of labour was the dominant note in the organisation of the workers, in the Byzantine the principle was applied far less strictly; whereas in Roman times there was clear division of function, separate grades, separation between those who worked on the carcass

* Lecky, *History of European Morals*.

† Oman, *The Byzantine Empire* (Story of the Nations).

‡ Bury, *The Roman Empire*, p. 67.

§ Choisy, *L'Art de bâtir chez les Byzantins*, pp. 176, 177.

|| Choisy, *ibid.*, p. 174.

and those who worked on the ornamentation of it, in Byzantine work the same worker's name is found on capitals and on simple ashlar. Choisy states, too, that everywhere in the East now work is done by a master-worker and his body of fellow workers, who carry out the work together, each performing every sort of task, rough and smooth, construction and ornamentation, and he gives the organisation of the workmen's guilds in the East to-day which have changed very little, if at all, from the ancient organisation of the Byzantine Empire.* "The workman," he sums up, "is no mere passive instrument, obedient without any regard to initiative or responsibility to the workshop foreman: he is treated as an intelligent power, and finds in front of him liberty and a field open to his imagination." "In the humblest work," say Lethaby and Swainson,† "the personality of the worker is delightfully expressed. A Byzantine brick in the British Museum is stamped 'XP made by the most excellent Narsis,' and a late Roman glass cup bears the legend 'Ennius made this. Think of it, O Buyer!'"

The workmen's organisations, moreover, took part in local government: we can see the beginning of that organisation of municipalities on the basis of the guilds, which is the distinctive feature of mediæval town life. It was the duty of the guild members, for instance, on the cry "Omnes Collegiati" to gather to help put out fires in the city.‡ "The crafts occupied fixed quarters in the city: all products had to be sold in open market at a standard price: the corporation usually bought materials in block, which it distributed among the members of its collegia."§ In short, while the government of Justinian was an absolutism, while, as Gibbon says,|| "taxation fell like a hailstone on the land, like a devouring pestilence on its inhabitants," yet the worker was beginning to be free—free industrially—and he was attaining that freedom by the power of association.

To what, then, are the particular characteristics of Byzantine architecture due? It is daring in construction (Procopius¶ tells of the accidents in the course of its erection—the hopes and fears when the great piers seemed ready to fail and the arches to collapse), and this may be traced to the presence of a population of free workers, of craftsmen to whom their work was not a task so much as a study: who were anxious for adventure in their art, who created an atmosphere of experiment which could stimulate the bold engineer,** Anthemius of Tralles, to daring enterprise. It is original: it initiates new forms, employs features in new combination. It created an altogether new type of capital, and here again we may trace the influence of the free workman (free, that is to say, in his labour). He was not set to do a fixed task to a definite model, he experimented. "The great capitals of Santa Sophia are remarkable examples of the evolution of beautiful forms on the mason's banker, the workman finding form in the stone block by the application of practical methods."††

A workman who had by association with his fellows won freedom for himself, brought to bear on the material before him the invention of a mind that could think of the work as of something of interest for its own sake, not like a slave as a task to be got through, or like a tradesman as something of value only for what it would fetch.‡‡ And as a result originality came into the work, a new style was born, the art of building awoke.

Byzantine architecture, as exemplified in Santa Sophia, is great because of its impressive size, because of its daring construction, because, above all, of the humanity that is beginning to show itself in it—we feel that new forms are emerging, that new experiments are being tried, that in the ornament

* Choisy, *L'Art de bâtir chez les Byzantins*. "Ces associations de travail (*sympyvakia*) ont un conseil exclusivement composé de ceux à qui un apprentissage suivi d'examen a valu le titre de maîtres (*paiderotes*). Le conseil est présidé par un chef électif, le *xparouaisiarch*, assisté d'un secrétaire (*grammateis*) ayant sous ses ordres un huissier (*kipez*) chargé de convocations. L'association, à l'exemple des collèges antiques, est . . . une corporation ouvrière, une confrérie religieuse et une société de secours."

† Lethaby and Swainson, *Santa Sophia*, p. 207.

‡ *Ibid.*, p. 208.

§ Lethaby, *Mediæval Art*, p. 65.

|| Gibbon, *Decline and Fall of the Roman Empire*, ed. Bury, vol. 3, p. 237.

¶ Procopius of Caesarea, *On the Buildings of Justinian*, tr. Stewart.

** Agathias writes of Anthemius that "he practised the art of inventions by which Mechanicians, applying the abstract theory of lines to materials, fabricate imitations and, as it were, images of real things."—Agathias, vol. 8, tr. Bury.

†† Lethaby and Swainson, *Santa Sophia*, p. 253.

‡‡ For the variety in plan and construction and ornament of Byzantine building, see *The Minor Byzantine Churches of Constantinople*, C. Courlay, *JOURNAL R.I.B.A.*, Aug. 31, 1907, and *Salonica*, C. Gourlay, *JOURNAL R.I.B.A.*, Nov. 24, 1906.

traditions are being broken through, that there are new forces stirring—in a word, the buildings begin to live. It is imperfect, no doubt; the interior is greater infinitely than the exterior: it still lacks complete unity, the form and material outside give no indication of the glorious garment with which the interior is clothed; and perhaps herein it reflects the unreality of the system that made its erection possible, the structure of society that achieved glory in oppression; that was not based on the well-being of all but on the taxation of many for the benefit of the few. It is again a little unsympathetic to Western eyes—it has much of the East in it, and recalls in its luxuriance the impressions of the strange and brilliant beauties of China, of Sumatra, of Ceylon which were brought to Constantinople by the Eastern traders who thronged to it. With Byzantine architecture, however, the building art wakes and is alive again. The influence of the condition of the worker on Byzantine architecture is shown in its merits, not in its defects, for the worker was becoming free.

After the age of Justinian Byzantine art speedily declined. The Eastern wars and the iconoclastic dispute, says Professor Lethaby, broke the tradition of the Hellenesque-Byzantine Style.* Choisy declares that the overwhelming influence of the priests stereotyped the style and the growth of hereditary influence in those responsible for the building art paralysed it.† There were gallant attempts at revival under Maurice and Heraclius and Constantinople served for centuries as the bulwark of Europe against its foes from the East—a service to civilisation for which it has received too little credit. On the whole, however, there was a steady deterioration and by the end of the tenth century Oriental and Barbarous elements had permeated its government, commerce, army, and rulers.

Constantinople remained, however, during the Middle Ages the artistic capital of the world. "Until about the year 1000 there was little in Western Art beside Byzantinism and Barbarism and up to this time the products of the various schools might better be called Byzantesque than Romanesque."‡ We find undoubtedly the spread of the Byzantine influence all over Europe during the Dark Ages; not only in Italy where, of course, its traces are obvious as in Venice (Torcello Cathedral, 1008 and St. Mark's, 1045), Pisa (the Cathedral, 1063), Florence (San Miniato, 1013)§ but in Germany (where Byzantine artists were introduced by Otho the 2nd. who married a daughter of the Byzantine Emperor in 978), France (especially Saint-Front, Périgueux, about 1100), Spain (churches near Oviedo instanced by Professor Lethaby), England (Theodore of Tarsus, Archbishop of Canterbury, 669-690).||

There is manifest in this Byzantesque or Romanesque architecture as regards the structure of buildings the old principle of stability—resisting thrust by mass—gradually giving way to experiments in equilibrium, resisting thrust by thrust: in the ornament, freedom amounting to licence, mixed with no little savagery and roughness, becoming gradually purged of its harsher elements, free, though disciplined, graceful, though still also grotesque.

The Lombard element—so amazingly vigorous and tempestuous which leaves its mark so deeply on Romanesque art in North Europe—seems to be considered now as itself derived from Byzantium and not as a source of building effort parallel to the Byzantine, originated in Rome and due to the Comacine Guild (workmen of the Collegia who, fleeing from Rome after the dissolution of the Western Empire, found a refuge in North Italy and maintained their organisation there, subsequently spreading their influence all over Europe).¶ "Lombardic art is rather to be understood as a geographical term than a dynastic distinction."**

If one may generalise over a very wide field, we may summarise the period between Byzantine architecture in its prime (525-560) and the beginnings of Gothic proper (in the middle of the 12th century) as partly a survival of the traditions of the earlier age, clung to with difficulty in a time when

* Lethaby, *Medieval Art*, p. 66.

† Choisy, *L'Art de bâtir chez les Byzantins*, concluding chapter.

‡ Lethaby, *Medieval Art*, p. 119.

§ There was a slackening of effort prior to the year 1000 (when it was supposed that the end of the world was to occur) and a great outbreak of building throughout Europe after that date.

|| *Medieval Art*, pp. 89, 90: "The Eastern influence in the planning of churches worked out in detail."

¶ See Leader Scott, *The Cathedral Builders*, for history of the Comacine Guild and the evidence in favour of the case for that Guild as the source of mediæval architecture and the link with the ancient building eras.

** Lethaby, *Medieval Art*, p. 91.

there was little possibility of definite advance in a world chaotic and disturbed in the throes of transition and readjustment, partly a gradual awakening, a beginning of experiment in new forms and methods, under the stimulus of a great revival. That gradual experiment, and the constant working out in the materials of building of the problems set to the builders by the new requirements of the spirit of the times, brings us without a break to its results in the style called Gothic.

The nature of Gothic has been described once and for all in unapproachable language by Ruskin in the *Stones of Venice*, and to attempt to summarise or paraphrase what he has written would be as difficult as it is unnecessary—for that chapter* must be familiar to all who have studied Gothic architecture at all. Many writers have since then endeavoured to sum up the essential elements of Gothic in a definition, or describe them in the space of a paragraph. Far the most adequate summary of its characteristics, I think, is that given by Professor Lethaby in *Medieval Art*.† “Gothic architecture was developed by free and energetic experiment: it was organic, daring, reasonable, and gay. The measure of life is the measure of Gothic. . . . As to these marvellous buildings [the great cathedrals] the half of their glories and wonder cannot be told. They are more than buildings, more than art; something intangible was built into them with their stones and burnt into their glass. The work of a man, a man may understand, but these are the work of ages, of nations. All is consistent development, stone is balanced on stone, vault springs from vault, interlacing tracery sustains brilliantly dyed glass as branches hold sun-saturated foliage, towers stand firm as cliffs, spires are flung into the air like fountains. In these buildings all may be explained as devised for ritual use and for the instruction of the people: all as material and structural necessity: all as traditional development: all as free beauty and romance in stone. From whichever point of view we approach them, the great cathedrals satisfy us, and their seeming perfections are but a part of a larger perfection. Nothing is marked, nothing is clever, nothing is individual nor thrust forward as artistic: they are serene, masterly, non-personal, like works of Nature—indeed they are such; natural manifestations of the minds of men working under the impulse of a noble idea.”

That description of the elements of Gothic can hardly be bettered. We have now to inquire into the causes of the growth of this great and triumphant achievement in the building art, and in the course of this inquiry further characteristics of the style will emerge. In the first place, we may note that in the early years of the twelfth century a great religious and intellectual movement began throughout Europe. During the Dark Ages, the huge Empire of Charles the Great having broken up, there was chaos all through the West. Norsemen raided the Western coasts, Saracens threatened Italy and France and were all powerful in the Mediterranean, Magyars and Slavs invaded Europe from the East. The Church was corrupt, the nobles were selfish and cruel and oppressed the common people remorselessly; kings were weak and their kingdoms crumbling to pieces. Feudalism, however, had, by the beginning of the tenth century, saved Europe from the Barbarians; Henry the Fowler, in Germany, beat back the foes from the East; the Norsemen were settling down in the West; the Christians in Spain, profiting by the divisions of Islam, were getting the upper hand of the Moors; Cluny was founded in 910, and began an era of religious reform and revival. In 1077 Gregory VII. won his memorable triumph over Henry IV. at Canossa, and throughout the twelfth century a remarkable outburst of religious enthusiasm permeated all the peoples, and was shown not only in the Crusades (1095–1275), but in the founding of the great religious orders, the Carthusians (1080), Cistercians (1098), Augustinians (1105), and Premonstratensians (1119). Abelard (1079–1142) and Arnold of Brescia (died 1155) stand for that “Twelfth Century Renaissance” which invigorated with new thought a Church which, as a result of the religious revival that we have described, stood at the height of its power, and was infused with a boundless enthusiasm and devotion. This devotion showed itself most notably in the great buildings which were everywhere raised to the glory of the Church—to such

* *Stones of Venice*, vol. 2, ch. 6, “Nature of Gothic.”

† Lethaby, *Medieval Art*, pp. 142, 143.

an extent, indeed, that the church bells were said to answer each other across hill and vale all over Christendom.

We shall see that this common bond of religion had no little influence upon the forces that brought about the achievements of Gothic architecture. A most important factor also, however, was the change that was taking place in the condition of the worker.

We have seen that the Byzantine worker, associated as he was with his fellows, had, to a large extent, freed himself from those restrictions which made the Roman workman a slave, and had begun to organise free self-governing guilds which, independent of the central authority, had yet begun to take part in municipal life and find for themselves a place in the scheme of the organisation of the community as a whole.

We see now that, during the Dark Ages, the guild idea still remained as in Constantinople, and that Byzantine masons, spreading all over Europe, but still remaining members of their guilds, kept alive the old principle. Professor Lethaby notes, for instance, that the order of the Arti in Florence in the thirteenth century follows closely the Constantinople models of the ninth century,* that the guild regulations of Paris are similar, and (more remarkable still) the Byzantine word for mason (*λατόμος*) was used both in France and England in the thirteenth century. Leader Scott traces also in detail the journeys of Lombard masons—often in the train of missionaries—to the remotest parts of Europe.†

But apart from these evidences of the continuity of the particular guild with which we shall be chiefly concerned—that of the masons—we find these associations springing up in the West independently, bred naturally from the dangers and difficulties of the time. Brentano‡ traces the original religious guilds—"sworn fraternities for the protection of right and the preservation of Liberty"—directly to the family, to the development of needs greater than the family could satisfy, and the forming, therefore, of an organisation, modelled upon it, but wider in scope. These guilds were independent of the towns, but in the twelfth century arose and multiplied the guilds proper—the Guilds Merchant—which were practically associations of citizens for the protection of their towns (again a natural outcome§ of the insecurity inherent in the feudal system). Originally co-extensive with the male population of the town, the Guilds Merchant tended, after the initial struggles were over and some security attained, to become exclusive, to be restricted to those citizens who owned a certain amount of property. Membership tended to become hereditary; the craftsman and all who worked at manual occupations were debarred from participation in the guilds, which tended to become oppressive oligarchies. This state of affairs was responsible for the formation of the craft-guilds—organisations of the workers on lines exactly similar to those of the Guilds Merchant, but democratic and inclusive of all members of the craft concerned.

Brentano|| gives in detail the history of the early struggles of the craft guilds with the "patricians," and sketches their progress from unauthorised unions of workmen to recognised responsible institutions—the representative body in every town. The time of the origin of the craft guilds extended from the eleventh to the middle of the thirteenth century. By the middle of the fourteenth century the craft guilds were everywhere victorious (Edward III. gave his approval to the guilds, and himself joined the Linen Armourers). By the beginning of the fifteenth century their decline and demoralisation had set in. The great industrial revolution of the end of the fourteenth century spelt ruin to the guilds. Their whole system depended on the practical immobility of labour. They postulated stability in industrial conditions, a stationary population that was very largely self-sufficient as regards each unit, a federation of self-supporting non-dependent communities. Above all, it was necessary to have a rural population that, fixed on the land and supporting itself on the land, should offer no competition to the worker in the town. In short, given stable groups, the guild organisation was able to cover the

* *Medieval Art*, p. 145.

† Leader Scott, *The Cathedral Builders*.

‡ Brentano, *History and Development of Guilds*.

§ Brentano, pp. 32, 33, for evidence of power of early Guild Merchant, e.g., Sleswig, 1130.

|| Brentano, *ibid.*, pp. 55, 56, 57.

industries in each group and regulate them in accordance with the wishes of its members—it was essentially an order of society based on non-competing groups.

Towards the end of the sixteenth century, however, there came about a radical change in the structure of that society: the capitalist system of production was born. The essential conditions for the existence of that system are thus summarised by Hobson.* First, a production of wealth not required to satisfy the current want of its owners, and therefore saved. Second, the existence of a proletariat or labouring class deprived of the means of earning an independent livelihood by putting their labour power into materials which they can freely appropriate, purchase, or hire, consuming or selling the product for their own advantage. Third, such a development of the industrial arts as enables indirect methods of production to afford profitable employment to organised labour groups using tools or machinery. Fourth, the existence of large, accessible markets, with populations willing and economically able to consume the products of capitalist industry. Fifth, the capitalist spirit, or the desire and the capacity to apply accumulated wealth to profit-making by the organisation of industrial enterprise.

The first condition was achieved by the discovery and appropriation of the precious metals. That wealth had been accumulated throughout the Middle Ages is of course obvious, but until "treasure" had been obtained it could not be employed as a basis of profit—wealth must be "monetised" first. It was the final collapse of the Byzantine Empire (in 1452) that opened the near East to the exploitation of the West and provided the necessary mediums for the transaction of capitalism. The existence of a proletariat was secured by the same event—"a huge proletariat, slave or nominally free, was . . . placed at the disposal of Europe in the near East."† Secondly (for England) by the Flemish demand for wool which, following after the abandonment of the traditional system of tenure of the rural workers after the Black Death, made pasture profitable, led to wholesale enclosures, the formation of large pasture farms under new men with aims entirely different from those of the old nobility, and the conversion of the yeoman and landed labourer into the landless wage-earner. The break-up of the Middle Ages began suddenly and dramatically in the fifteenth century to give place to the modern competitive commercial system. The immediate effect on the Guilds was that they found themselves faced with a great influx of labour into the towns. The transition from agriculture to sheep-farming meant the employment of far fewer hands, the enclosures deprived thousands of their home and living and they all flocked to the towns—to offer the only commodity they had for sale—their labour—for what it would fetch there.‡

The Guilds, therefore, faced with the competition of great numbers of workers from outside, were driven to choose between admitting them to the organisations or excluding them, not only from the Guild, but also from the trade or craft. The first solution not unnaturally seemed impossible—it implied the lowering of the standard of production and with it the standard rate. Their dearly bought skill, the traditions they guarded, were not to be given away broadcast. They decided on exclusion. The Guilds now became more and more difficult to enter, they demanded greater and greater privileges. They seek to avert by strict regulation the incidence of that competition which was foreign to all their ideas and which threatened to shatter the whole system of their industry.

The craftsmen are now, therefore, not the ordinary citizens organised in their callings, but a privileged class, a body set apart from the general mass—"artists." Temporarily they won the day, but the victory meant their eventual extinction. Like the old Guilds Merchant they had become unrepresentative of the mass of the workers. There had grown up outside their ranks a regular "working-

* *Evolution of Modern Capitalism*, p. 2.

† Hobson, *ibid.*, p. 11.

‡ More, *Utopia*, Temple Edn., pp. 19, 20. The husbandmen be thrust owte of their owne . . . by one means therefore or other they muste needes departe awaye poore, selye, wretched soules, men, women, husbandes, wives,

fatherlesse children, widows, wofull mothers with their yonge babes and their whole household smal in substance and much in numbre, as husbandrye requireth manye handes. Awaye thei trudge, I say, out of their knowen and accustomed houses, fyndyng no place to reste in.

class " unknown before.* Like their predecessors, the craftsmen of the early Middle Ages, this class would have to form their own organisations and fight for their rights, for the maintenance of a standard rate and for regulation of trade conditions—but in far different circumstances and not till centuries had elapsed.†

But in the consideration of Gothic—whose great period was roughly from the middle of the twelfth to the middle of the fifteenth century—we are concerned with the guilds at their best: not in their decline, nor when they had become corrupt and demoralised, but when they were free great associations, the defenders of freedom—as the living elements in the towns—against the tyranny of the Kings, the lords, the wealthy.

What was the effect on Gothic architecture of the condition of the workers—the guild-craftsmen of the Middle Ages? In the first place, the work was carried out in the spirit of real co-operation. The individuality of the worker was not suppressed, but each was called upon to contribute his quota of invention as well as of simple execution. The architect worked with the workmen, the members of the guild discussed problems, meeting together as they arose; the general lines of the building being decided and known to each worker, freedom, to a greater or lesser extent, was allowed to the individual worker in the detail for which he was responsible.‡

Thus from the fact that the worker was constantly forced to bring his inventive powers to bear on the fashioning of the material before him, new forms were continually evolved, existing forms were infinitely varied. He was controlled and restrained, however, in the exercise of this inventiveness by the tradition so carefully handed down in his guild, and by the customary methods of treatment which it taught. Hence arises that amazing unity in variety which is so characteristic of the great Gothic buildings. The individual workers were free to invent, but the result was not anarchy because a common aim and common tradition co-ordinated their efforts almost without their being conscious of it.

Again, this very blend of freedom and association produced another characteristic of Gothic—its imperfection. The man's reach must exceed his grasp. He will (if he is free) not key down his aim to the level of his execution, but constantly aim at more than he can compass—he will suggest an ideal rather than achieve it. The Gothic builders were always daring new feats, attempting hazardous constructions, and sometimes failings—but this is the particular glory of Gothic, that it implies growth, aspiration, adventure. In the later period the inspiration slackens, the end attempted is achieved, execution even outruns invention, but that is in the decline of Gothic, when the economic and social conditions essential to its life are no longer in existence.

In the great period of Gothic there is a wonderful humanity about the buildings. They are not the obedient carrying out of the ideas of an artist for the admiration of a connoisseur; they are

* For Guilds' inclusion of all workers and subsequent growth of working class of wage-earners outside them, see Brentano, *Origin of Guilds*, p. 72; Mrs. J. R. Green, *Town Life in the Fifteenth Century*, vol. ii. p. 101; Lodge, *Close of the Middle Ages*, p. 424; S. and B. Webb, *History of Trade Unionism*, p. 6.

† Mrs. J. R. Green, *Town Life*, vol. ii. pp. 108, 109. "One of the main results of the triumphant guild system was to develop throughout the country a formless, incoherent multitude of hired labourers, who could by no possibility rise to the positions of independence, and had no means of association in self defence. As the weaker members of the crowd from time to time sank back into utter penury, the outcasts of the industrial system slowly gathered into a new brotherhood of the destitute, and even in the fifteenth century, long before they had been reinforced by the waifs and strays of town and country that flocked to their sad fellowship on the dissolution of the monasteries, the advanced guard of that army of paupers appears in the streets of the boroughs to trouble the councils of municipal rulers."

‡ For full particulars, from documents, of the details of mediæval building organisations, see Lender Scott, *Cathedral Builders*, Bk. 4, chs. 3 and 4; see also Lethaby, *Westminster Abbey*, Appendix, p. 362.

§ Mr. Blomfield's contention that the Gothic builders were bad builders (Presidential Address, R.I.B.A., November 8th, 1915, p. 2) because some of their structures failed—either soon or after centuries—is beside the mark. The risk of failure that is the inevitable accompaniment of daring, rarely troubled the judicious architects of the Renaissance; but they were not therefore better builders than the bolder men of the Middle Ages. In the same passage, the criticism of the Guilds as "hopelessly corrupt in their latter days," and of the sixteenth century master builders as "mostly bad builders," refers, of course, to a period when the Middle Ages had come to an end, the whole mediæval structure of society had been broken up, and the Renaissance was in full career.

the sum of the aspirations and endeavours of a body of workers appealing to their fellow workers, bound in sympathy with them by ties of common outlook, common social condition, and, above all, common religion. A great cathedral like Amiens is the product of the workers no less than of the architect; it is the product, too, of the desires of their fellows—the common people for whom both the details of its sculpture and the symbolism of its construction made up a Bible, a book every page of which they could understand.

"It takes two," says Thoreau, "to tell the truth—one to speak and one to hear," and he means by that, I fancy, not that truth may be told and be unrealised for lack of hearers who can understand, but that without both those elements truth cannot be told at all, however much it may be felt. That gives the clue to the triumph of mediæval architecture. There was the "effective demand" by the whole body of the community that made the response by the builders possible—effective through the sympathy born of equality in essentials, however great might be the disparity in externals between the members of the community. Everywhere over Europe in the twelfth and thirteenth centuries the guilds of workers were fighting for freedom, everywhere the "free towns" were showing that by combining together the workers, powerless as individuals, could win their rights against the most powerful opponents.*

Freedom and association are the two ingredients† of Gothic architecture. It is great architecture, and great because it fulfils all the conditions of greatness laid down at the beginning of this essay. The cathedrals have impressive size and daring construction—can any other building give the same shock of wonder and delight as Beauvais, with its dizzy heights, its slender grace, its springing spiny rigidity?

It has rhythm—at S. Ouen, Rouen (the very crest of the wave, the bloom of Gothic—even just beginning to be over-blown), it is perfectly realised, and in a hundred other Gothic buildings of less regularity part answers to part with inevitable balance and responsiveness. It is penetrated through and through with humanity—whether in the multitude of voices on the West Front at Amiens, or in the little familiar whispers of the builders in small country churches; in the fault which caused a difficulty to spring up, and the ingenuity that found a way round it; in the triumphs and failures that together make up a greater perfection than can be won by achievement alone.

Finally, for Gothic as for Greek and Roman art, the magic of memory works its wonders. The influence of the condition of the worker on Gothic architecture is shown in its beauties, is in fact the very essence of its composition, for the worker was free.

We have seen how the decay of Gothic architecture came about. It synchronised with the break-up of the mediæval system—economic, industrial, and political. It was the product of the special circumstances of its time, the outcome of the conditions under which its producers lived and worked. To try to prolong it or to revive it after those conditions had disappeared was to attempt the impossible. The worker was being transformed from a free, largely self-sufficient citizen, associated closely with his fellows and controlling with them the conditions of his labour, into a wage-earner, without influence on the methods or aims of the productive machine of which he was a part, an instrument in the hands of the capitalist and yielding profit to him. The word "instrument" recalls Aristotle's phrase, "the slave is an instrument of the higher intelligence"; we are reverting to the conditions that produced classic architecture—a return to classic forms was inevitable.

It is perhaps hardly necessary to sketch the progress of modern capitalism, the decline in the position of the worker. It is enough to point out that the constant improvements in production characteristic of modern industry are capable of bearing fruit either in an amelioration of the lot of

* Lodge, *Close of the Middle Ages*, pp. 424, 425.

† Mr. March Phillips' identification of Gothic with the spirit of Nationality (*Works of Man*, pp. 195, 196) is difficult to accept. The growth of French national feeling, promised in the success of Philip Augustus, was very slow and set back by continual reactions. The dominant influences in the Middle Ages are the persistence of the idea of the Empire

and the unquestioning adherence to the conception of a universal Church (Bryce, *Holy Roman Empire*). It was these bonds uniting men of all lands, combined with the local freedom and growing nationality which Mr. Phillips notes, that gave to Gothic its unique character of infinite local variety with remarkable general similarity in essentials.

the producers (*e.g.*, shorter hours, higher wages) or in an increase of profits. That the accumulation of wealth in the hands of certain members of the community (capitalists) enables them—even forces them—under competition to divert the surplus produced to profits, since, owing to the improvements making the same amount of production possible with less labour than formerly, a reserve of labour is created, which, by its competition for subsistence, tends to force wages down to subsistence level. By association with his fellows, the worker, individually powerless, may secure a proportion of the surplus he has helped to create, but this revival of the principle of association, striking as it is to-day, was of slow growth, and is valuable rather as an indication of what may be achieved than on account of what it has already won.*

The effect upon architecture of the alteration in the status of the worker was instantaneous and striking. In the first place, we find the demand for building works coming less from the community as a body and more from the individual—in proportion as wealth began to be concentrated more and more in the hands of individuals and sections of the nation, and less and less distributed as the possession of organisations. Hence the great guild churches (as at Lübeck, for instance) and guild halls (as in Belgium) give place to mansions built to emphasise the power of a king or to advertise the wealth of a minister. Churches are still built, of course, in profusion, but they are not raised directly by the organised workers. Thus, in France, Chambord rises to gratify the passion for magnificence that was the dominant motive with Francis I., Chenonceaux is built by a successful banker, later Vaux-le-Vicomte is raised, avowedly, to advertise the unscrupulous acquisitiveness of Fouquet.†

Further, in the early Renaissance buildings, there is visible an extraordinary anarchy. The old freedom is still alive, but it has lost the controlling tradition that could harmonise the idiosyncrasies of individuals. It is charming because it is the last outburst of freedom by the workmen, it evokes affection if it fails to call forth reverence. It makes it clear that, so changed are conditions, co-operative art—in its fullest sense—is impossible. The demand for control by the architect is insistent. The progress of the degradation of the worker is slow, but already he must work under orders, he is no longer capable of determining the course of his own endeavours, he must go into harness, and the architect will hold the reins. Nowhere can this change be seen more vividly than at Blois. There the François Premier wing is a riot of irregular arrangement and fanciful detail. It is not so much freedom as license. It is striking, but fretful, clever, restless, and incoherent. Right against it stands the great mass of the Gaston d'Orléans wing, restrained, purposeful, complete. It is on a lower plane altogether: it is architect's architecture: the worker's individuality does not become articulate at all in it, but it is more successful than its older neighbour, because the conditions which made the free collective production sought to be realised in the one unattainable, were conformed to in the autocratic individualism of the other.

In the later works of the Renaissance the process goes further still. The change from Gothic is admirably summarised by Professor Lodge:—‡

Gothic architecture, whatever its faults, had given great scope for originality. After the main design had been agreed upon, the completion of details had been left, in great measure, to the ability and imagination of the individual workman. But the architecture of the later Renaissance laid supreme stress upon symmetry and uniformity. Thus the workman could no longer be allowed to be original. Every detail, as well as the central design, had to be fixed from the outset. The result was magnificent and imposing, but it was purchased at the sacrifice of originality and imagination. When the first vigour of the intellectual revival was spent there was a marked decline in architecture as in sculpture, because in both the imitative faculty was cultivated rather than the power of independent creation.

Hence Renaissance architecture is in no sense progressive; it does not evolve new forms, but is occupied with adjustments and adaptations of features already evolved. As we have seen in Byzantine architecture, as soon as the worker began to attain freedom (through association with his

* Hobson, *Evolution of Modern Capitalism*, chs. 1, 2, 3.

‡ *The Clove of the Middle Ages*, p. 532.

† W. H. Ward, *Renaissance Architecture in France*, vol. II.

fellows) and was allowed to exercise his ingenuity upon the material before him, he produced a great variety of new forms, the product of the thought which was stirring in a mind awake to the problems latent in every constructional enterprise.

The same phenomenon was even more apparent in the Mediæval period. With the Renaissance, however, as we have seen, the condition of the worker unfitted him for the undertaking of such a task; the architect, not himself in contact with the material, working out his design in the office, not in the workshop, was equally unfitted, and the result was a practice of architecture which, perforce, had to seek approbation on the ground of the learning it displayed, the penetration into the spirit of classic architecture which it evidenced, the ingenuity with which it adapted classic forms and ideals to the changing conditions of the time. To recall a famous phrase of Meredith: the Renaissance architects had not genius but they had "aptitudes."

A further effect of the change in character sketched above was that the appeal of architecture was more and more to the cultured, less and less to the common people. And this was so, not only because the architect was adopting a style which could only be appreciated by persons familiar with the history and literature of the community whose ideals it expresses, but because the mass of the people were tending steadily towards that alienation from direct individual production which characterises them to-day. That is to say, the "effective" demand for building work which we noted above as characteristic of the communities of the Middle Ages was diminishing; it was ceasing to be the demand of people who knew what they wanted for work which they could understand; it tended to become the demand of inexpert consumers (with the exception of the aforesaid connoisseurs) for a commodity of whose merits they were incapable of judging. The intimacy between the producer and the consumer, between the craftsman and his fellows, was disappearing. The responsive sympathy between the individual and the community which is essential to the production of great art was gone.

I need hardly elaborate the history of the change in the status of the worker which took place gradually but with increasing velocity during the latter stages, from the sixteenth century to the twentieth. We have at first the breaking up of the mediæval non-competing groups by the revolution that followed the Black Death (sketched above). We have the creation of a proletariat—an army of landless, resourceless workers, threatening by their struggle for subsistence the customary standard of the old organisations. We see this army swollen by the dissolution of the monasteries in the sixteenth century; and we see the creation, through the monetization of wealth, of the capitalist who is destined to inaugurate the system whereby the possession of accumulated wealth is to yield profit, through the acquisition of materials and the organisation of labour on a large scale: a system which is the antithesis of the mediæval trade policy whose fundamental principle was "protection to live freely and independently on an industry based on small capital and labour."* We see by the application of the principle of division of labour and by the marvellous inventions of the late eighteenth and early nineteenth centuries, the individual becoming more and more closely involved with his fellows in the processes of production, but involved in processes over whose direction he had no control whatever, until at length he is brought to a condition which has some analogy with that of the worker under the Roman Empire, namely, that he is forced into associated production, without a voice in the direction of the body that controls him: he is to all intents and purposes a slave.† We reach, finally, the curiously anomalous situation with which we are familiar to-day, of a community whose

* Brentano, *Origin of Guilds*, p. 58. Note resistance to "cornering" cited in the same paragraph.

† Ruskin, *Stones of Venice*, vol. ii, ch. 6, par. 1. . . . the foundations of society were never yet shaken as they are at this day. It is not that men are ill fed, but that they have no pleasure in the work by which they make their bread, and therefore look to wealth as their only means of pleasure. It is not that men are pained by the scorn of the upper classes, but they cannot endure their own; for they feel that the kind of labour

to which they are condemned is verily a degrading one, and makes them less than men. Never had the upper classes so much sympathy with the lower, or charity for them as they have at this day, and yet never were they so much hated by them, for of old the separation between the noble and the poor was merely a wall built by law, now it is a veritable difference in level of standing, a precipice between upper and lower grounds in the field of humanity, and there is pestilential air at the bottom of it.

units are closely associated and interdependent, but are divided sharply into mutually antagonistic classes; a community which devotes itself with ardour to production, but is little able to determine what and how it shall produce; a community in which industrial slavery and political freedom exist paradoxically side by side, which possesses all the elements which contribute to a coherent society, without the essential force that can bring them together.

Now during the Middle Ages the bonds that united in strong sympathy the disconnected, self-sufficing communities of Europe were three. First, the common organisations—the guild system which united members of the same craft together. Without endorsing Leader Scott's claims for the universality of the Comacine Guild and its direct responsibility for so many of the great building achievements of the Middle Ages, the particulars she quotes from the documents collected by Cesare Guasti give exceedingly interesting evidence of the working of the guilds in detail. Especially illuminating is the account of the relations of Brunelleschi with the Masons' Guild in Florence, his strike for independence of the organisation, his final triumph, the break-up that followed of the Guild—the old democratic organisation of the workers—and its supersession by Lorenzo de Medici's school in the Via Larga—the appanage of the wealthy connoisseur. How closely the guilds were connected with the government of a mediæval community and how their decline synchronised with the gradual diminution of freedom in that community may be very clearly observed in the changes which took place in the constitution of Florence from the thirteenth to the sixteenth century—from the early Constitution based on the Seven Greater Arti and the Fourteen Lesser Arti, through the gradual modifications inserted by Lorenzo de Medici, to the final overthrow of the Republic and the appointment of Alessandro de Medici as Grand Duke in 1530.* The part played by the free towns in modifying the worst results of Feudalism and creating new ideals of freedom has already been touched upon. The results of this change in the status of the worker may be studied, too, with advantage in the immortal autobiography of Benvenuto Cellini—the reverence for imitation of the antique instead of original creation, the dependence of the worker on the rich amateur, the chaos that ensued from the "triumphant emergence of the individual"—all are evidenced in page after page of his narrative.†

The second bond that united the communities of the Middle Ages was the idea of the Empire. The survival of this idea of a common head of the peoples of Europe, of a mysterious semi-sacred tie, however fragile, of a sentiment that might stand for the sum of the desires of the Western peoples—the survival of this idea in face of the growing sense of nationality, is one of the most remarkable phenomena in history. Bryce has worked it out in the *Holy Roman Empire* in a most masterly summary. The important point to recognise, for the purpose of this essay, is the fact that, although the Empire did not actually come to an end formally till 1806, the last great exponents of the Imperial Idea, the last sovereigns who were able to give that idea any sort of concrete reality, were Maximilian I. (1493) and Charles V. (1519). The triumph of nationality and the last stages of the Empire coincide with the end of the Middle Ages and the beginning of the Renaissance.

The third bond, closely connected with that of the Empire, was the Church. The influence of the Church in the Middle Ages was, of course, almost greater than we can realise. However much the principles it taught were neglected and controverted in the lives of those who professed them, however ineffectual the Church was as a scheme of government, it was the one great stable institution amid the chaos of the Middle Ages, the one power that could stand for a scheme of organisation amid a welter of conflicting interests; above all it impressed on mediæval thought ideals which, however

* Summarised in *Europe in the Sixteenth Century*. A. H. Johnson, Appendix 2.

† J. A. Symonds, *Renaissance in Italy*. The Fine Arts, p. 351. "These three men—Machiavelli, Cellini, and Aretino—each in his own line, and with the proper differences that pertain to philosophic genius, artistic skill, and ribald ruffianism, sufficiently indicate the dissolution of the social bond in Italy

They mark their age as the age of adventurers, bandits, bullies, Ishmaelites and tyrants." The extent to which the spirit of association had decayed in the last two centuries is well illustrated by the growth of the Lyric—the cry of an isolated soul for sympathy—and is summed up in M. Arnold's stanzas "To Marguerite," a point of view almost incomprehensible, to the man of the Middle Ages.

far they fell short of realisation, profoundly modified the defects and counterbalanced the vices of the men of that age, an age of mingled horror and delight, of abasement and achievement.

Mr. Davis concludes an able description of the defects and virtues of the mediæval Church* with the following summary of the abiding value of its influence: "What appeals to us in the mediæval outlook upon life is, first, the idea of mankind as a brotherhood transcending racial and political divisions, united in a common quest for truth, filled with the spirit of mutual charity and helpfulness and endowed with a higher will and wisdom than the individuals who belong to it; secondly, a profound belief in the superiority of right over might, of spirit over matter, of the eternal interests of humanity over the ambitions and passions of the passing hour. Without Christianity these articles of faith could scarcely have passed into the common heritage of man; and, without the Church, it is in the last degree improbable that Christianity would have survived that age of semi-barbarism in which the foundations of the modern world were laid."††

We see then, in the Middle Ages, the principle of association everywhere dominant. The individual is powerless. In the village communities (with common ownership and cultivation under the manorial system), in the Church, in the guilds, the fact is realised that the individual by himself is powerless, that it is only by association with his fellows for mutual protection that he can attain freedom. It is realised that it is only by the individual losing himself in the community that his individuality emerges. The Renaissance (when, as Professor Blomfield reads it, "the long struggle of the individual towards self-realisation ends triumphantly")‡ marks the disappearance of that individuality with the endings of the associative influences that brought it forth. The guilds were swamped by the creation of the proletariat, the Empire was shattered to fragments by the impact of the force of nationality, the Church was divided and weakened to a shadow of its former self by the Reformation and all that it inaugurated in the region of thought.

To regret these great happenings, as some have done, is to the last degree unwise. Putting aside all other considerations, if the immediate results to our art were disastrous, yet that revolution which made the modern world what it is to-day offers infinitely greater possibilities than even the Middle Ages afforded the men of that day. Architecture is essentially a co-operative art: its very nature requires the existence of that principle of association which we have seen characterising the life of the Middle Ages. That principle is, as I hope to shew, implicit in the industrial conditions of the modern world, and capable of an intenser as well as of a wider realisation than has ever hitherto been possible.

At this point, however, I wish to summarise briefly the effect of the Renaissance on architecture. I have already indicated the principal changes in architectural methods and aims which followed the altered condition of society that the revolution of the fifteenth century brought about. It may bring out more clearly the essential qualities of Renaissance and Modern Architecture if we consider what has been written of it by one of its ablest exponents—Professor Blomfield. As Professor of Architecture at the Royal Academy he has summarised his teaching in a series of admirably expressed and closely argued lectures—*The Mistress Art*—and has more recently—in his Presidential Address to the Royal Institute of British Architects—stated his views briefly and in a more polemical form. If we examine *The Mistress Art* we find the author's views taking shape very early:

The individuality of later Gothic is as remarkable as its uniformity, but it is the individuality of detail rather than of architecture. The sculptor carved whatever took his fancy in his home or in the fields around him, and so the range of his detail was infinite; but the building as a whole attached itself to some well-defined type, and can hardly be regarded as an individual expression. So, too, in the earlier years of the sixteenth century in France and England, the last days of the master-builders, we find detail of every kind, but nothing as yet to show the impress of the master-mind. It is not till the maturity of the Renaissance that the long struggle of the individual towards self-realisation ends triumphantly, that the architect becomes henceforward an individual artist, conscious of his own technique and

* H. W. C. Davis, *Mediæval Europe*, chaps. 5 and 6.
† *Ibid.*, pp. 154, 155.

†† For religious basis of the guilds, see Brentano, p. 69.
‡ *The Mistress Art*, p. 52.

ideals, as the painter and sculptor of theirs. It is only then that the materials are available for what one may call the psychological study of architecture, that is, the interpretation of an artist's work by his personal temperament.*

That passage challenges the whole position that is sought to be established in this essay. Is the architect, as a matter of fact, in a position comparable to that of the painter or sculptor? Is it a triumph when he becomes an individual artist, or is it a sign that his art has passed, for the time, from the heights where the noblest achievement is possible to a level where the best that can be attained is only second-best?

I believe that the position that Professor Blomfield takes in this passage—and it is implicit in the whole book—is fundamentally unsound. Architecture is essentially a co-operative art. First, it is, as Bacon emphatically stated, not merely the practice of an art, but the production of a utility.† It is therefore closely connected with the life of the people as a whole, must reflect their needs, must be controlled by their requirement, must be conditioned by their demand. The architect is in no way (as is the painter or sculptor) free to give conscious expression to his individual ideals: only so far as those ideals correspond with those of the community as a whole can he make them take form. Great architecture presupposes an intimacy between the individual architect and his fellow-producers which is the very antithesis of the conception of the artist as one of a class separate from the mass of his fellows and seeking the expression of his own individuality *consciously*.

Secondly, the architect does not by himself give form to the work he has planned. Unlike the sculptor or painter, he is forced to work in association with others. He must work with or through his fellows. If he works *through* them, if he is to impress his individual ideals upon the work, the executants must be entirely under his control, docile, obedient, carrying out with accuracy the designs he has set for them to copy. This can be done and is done, but the result is, do what you will, second-rate. The reproduction of a copy can never be the same as spontaneous original creation. Human beings are so made that if you suppress their individuality you lose what you cannot replace—the mysterious quality that makes beauty. Freedom is an indispensable ingredient of beautiful work.

On the other hand, if the architect is to work with, instead of through, his fellows, there is implied a close intimacy, a sympathy, an equality of condition and similarity of outlook which is impossible of realisation to-day. "Associated Building," as practised in the Middle Ages, is entirely unrealisable in the modern world. Professor Blomfield ridicules it,‡ and shews how impracticable it would be under modern conditions—and does not realise, I think, how far that frank admission will carry him. It is in the line of argument that his appreciation of the revived Classic style leads him to follow, however, that the limitations of that style can most clearly be traced. Thus he is led to the conclusion that the one indispensable element in great building is size, or the impression of great size§—the one element, that is, which is independent of the quality of the labour employed, independent of the character of the civilisation concerned, independent—at least so far as size, as opposed to the impression of size, is concerned—of the ability of the architect. This consideration leads him, logically enough, to an enthusiastic appreciation of the architecture of Egypt,|| an architecture which is indeed impressive from its massiveness, but which attains that impressiveness by an expenditure of material and labour out of all proportion to the result achieved: an architecture, moreover, which is obviously the work of slaves—and those slaves of unparalleled servility—for tyrants characterised by an amazing poverty of invention and a colossal stupidity. The quality of size is the quality which, above all others, is most attainable to-day. Wealth can buy it when it can buy nothing else. The wealthy can appreciate it when they can recognise no other artistic quality. "The Grand Manner" is em-

* *The Mistress Art*, pp. 51, 52.

† Bacon, *Essay on Building*: "Houses are made to live in, not to look on, therefore let use be preferred to uniformitie, except where both may be had."

‡ Presidential Address, 1913, p. 3.

§ *The Mistress Art*, p. 166; see also p. 187: "Great size,

or I should say the power of producing the effect of great size in orderly distribution, is one of the essential qualities of architecture. Short of that power I do not think any architecture can be called beautiful; at least it falls below the highest excellence of the Art."

|| *Ibid.*, pp. 164, 165.

phatically the style best adapted to the capacities of the capitalist, who to-day makes mainly the effective demand for monumental architecture.

Again, consideration of the fact that Renaissance architecture is a revival of a revival, that "invention and originality will best be shewn in the use you make of these accepted forms"* rather than in progress towards the evolution of new ones, leads Professor Blomfield to find cause for admiration in the fact that "the Egyptians never changed"†—that the same type persisted for 5,000 years practically unaltered, a consideration, I submit, which should damn any style outright, for, as has been suggested already, progress, or the promise of progress, is essential to the highest form of beauty in architecture.

Again, Professor Blomfield recommends to his students, as one of their chief aims, the recovery of older tradition and a larger intellectual background, through the study of the architecture of Imperial Rome;‡ and it is a true instinct that leads him to do so—it is that sort of architecture that would fittingly reflect the conditions existing in the modern world.

Again, he notes the dependence of later French Renaissance architects on the wealthy connoisseur, and looks forward, perhaps, to the time when, the wealthy becoming more cultured, such a system may again become operative.§ And here, too, Professor Blomfield has read his age rightly. That vesting of the decision as to what shall be produced, how it shall be produced, and by whom, in the hands of the capitalist instead of the community, began with the great industrial revolution that synchronised with the Renaissance, and is still largely operative to-day.

The question that all Professor Blomfield's arguments evoke, however, seems to have escaped him. One admits freely that the existing situation is admirably analysed, one realises that, given the conditions by which we are bound to-day, the lines he indicates must be followed, but are we to acquiesce in those conditions? We have reviewed the conditions that in the past have found their expression in the great historic styles of architecture; we have determined that Association and Freedom—and one is unattainable without the other—are essential to the highest achievements in architecture. Are we to agree that those essentials are absent to-day, and do nothing more? Are we not only to accept as inevitable the second-rate—and even the work of our greatest men under modern conditions must be second-rate—but in accepting it, glory in our limitations and proclaim that, after all, this commercialised building is "the only manner in which architecture can worthily express itself?"||

I submit that it is our duty to turn our backs on those who thus prophesy smooth things, and examine how far there are latent in the existing industrial and social structure of the world to-day the conditions which are indispensable to the true practice of our art, and in what way we can make those submerged forces operative. In the first place, it is obvious that the mere physical difficulties in the way of association between various peoples are far less than they were in the Middle Ages: the discovery of rapid means of communication of all sorts has rendered comprehension of other nations by any one nation possible to an unprecedented extent. The creation of common agreement in essentials among the various communities of the West, for instance, such as was sought to be symbolised in the Holy Roman Empire, is, as far as physical difficulties are concerned, no difficult matter. Again, as in the Middle Ages, so to-day, the worker has found that by himself he is powerless; only by combination with his fellows can he obtain freedom. To identify the Trade Union of to-day with the Guild of the Middle Ages is clearly mistaken. They are different fundamentally both in structure and function.¶ Whereas, for instance, the Guild was an association both of workers and directors controlling the processes of their labour, owning the materials and what they produced from those materials, the Trade Union is an association of workers only, controlling little the conditions or direction of their

* *The Mistress Art*, p. 151.

† *Ibid.*, p. 164.

‡ *Ibid.*, p. 251.

§ *Ibid.*, p. 280.

|| *Ibid.*, p. 168.

¶ S. and B. Webb, *History of Trade Unionism*, pp. 14-15.

labour and without ownership of material or product. They have this in common, however, that they embody the same principles of democratic organisation to secure for each the rights that each can only enjoy when they are claimed for all.

Besides these workers' associations, however, the times in which we live have shown an enormous increase in the corporate activities of the community as a whole: more and more is there a tendency for the community (whether the village, town, county, or whole nation) to take out of the hands of individuals and groups of individuals the direction of the enterprises in which it is most directly interested and to vest it in the community.*

Now it is in this tendency (the existence of which will not be disputed) that I believe the best hopes for the future of our art to lie. Not only by the raising of the status of the workers immediately concerned will the necessary conditions for great architecture be created. By progressively throwing more and more responsibility on the community as a whole for the satisfaction of its needs there will be created that intimate relation between the citizen as producer and the citizen as demanding production, that, as we have seen, is necessary if the highest form of art is to result. Exactly in proportion as any section of the nation is apathetic, unintelligent, degraded, to that extent will its art suffer. "Architecture is the matrix of civilisation." The impress of the community as a whole will be upon it, do what we will.

An architecture that seeks appreciation from the connoisseur only—and Professor Blomfield seems to accept this condition†—is self-confessed a failure. From its very nature great architecture must be the sum of the impulses and aspirations of a whole people. It is a people articulate in stone: its position as greatest of the arts is based on this fact, that it is not the work of individuals for individuals, but of an association for an association, of a community for a community: it is not only an art, but also a utility.

What, then, is the immediate duty of the architect to-day? To attempt to revive mediæval forms is, as Professor Blomfield argues so trenchantly, entirely ridiculous: the conditions that produced them are not in existence to-day. Any attempt, again, to revive the guild of the Middle Ages must be doomed to failure,‡ for sharp divisions of interests between employer and employed outside under the modern industrial system, must necessarily be reproduced within such guilds. Again, Mr. Ashbee's ingenious scheme for creating, as it were, an island in the great sea of competitive production whereon the craftsman may draw breath and find his footing and get a fair start,§ that remedy can hardly be considered adequate to deal with a sickness which is affecting not a class nor a trade, but a whole people. Only by resolutely setting himself to further in every possible direction the principles of freedom and association will the architect be doing his part in making possible a revival of his art.

Only by creating common interests, common ideals, each working for all, and all for each, shall we get, for instance, that harmony in our town architecture the lack of which is so manifest to-day: which could make a street like Holborn, or worse still, the high streets of the suburbs, a coherent whole—infinately varied in separate parts, but homogeneous in character, instead of two rows of advertisements in stone and brick, each jostling each for precedence and beckoning in frantic endeavours to be first to catch the public eye. Only so shall we avoid the mechanical uniformity of some town-planners that will otherwise be turned to at last by a people worried by the fretful incoherence of their surroundings. A unity achieved not by the free aggregation of similar aims, but by the arbitrary imposition of an individual idea.

Again, it is only by connecting closely the association with its habitation that we can regain once more that abiding interest for our buildings which arises from their intimate participation in the history

* For instance, the Nationalisation of Railways, Municipal Housing, Gas, and Water.

† *The Mistress Art*, p. 126.

‡ S. and B. Webb, *History of Trade Unionism*, p. 117. Note the interesting project of the Builders' Union, 1833, when elaborate plans were propounded for the undertaking

of all the building in the country by a National Guild of Builders, each lodge to elect a foreman, and the foremen to elect a general superintendent. The disappointment of these high hopes was rude and rapid.

§ C. E. Ashbee, *Should We stop teaching Art?*

of their possessors. Just as for the individual his home has a peculiar quality of charm, a significance more intense for him than for anyone else, so for the organisation, whatever it be, will its home acquire a more widely extended attraction, just such as the great communal buildings (like the Abbey, for instance) hold now. Instead of the office—a place to be taken and occupied, and left without a pang—we should have something corresponding in character to the Guild Hall.* We might even have churches that would seem to be possessions of the people in the same way that the great guild churches were (the churches at Lübeck, for instance). In large things as in small the good citizen to-day will endeavour to forward "the emancipation of land and industrial capital from individual and class ownership and the vesting of them in the community for the good of all." He will aid every effort of the worker to win by combination with his fellows in democratically organised associations that essential equality between all members of a community which is the life blood of freedom.

For the architect, above all, it is necessary that he should turn from controversies as to styles and traditions, and realise that every style is inevitably the product of the conditions of its age. But he must realise, too, all the time that it is the conditions—changeable, variable conditions—which make the architecture; that we can, each individual of us, change and vary those conditions, and that it is there rather than in any merely technical sphere that the architect will win advance for his art. "If we are to possess a civilisation worth expressing itself artistically," writes a modern architect,† "we must do something besides establishing art lectureships: we must change the conditions of life; the temper of the people."

"The revival of our arts and crafts," writes a modern craftsman,‡ "is obviously and almost solely a political question."

Not in the architectural schools, not in the adoption of any style of the past,§ not in the study of ancient buildings, necessary though that is, is the line of advance. The triumphs of the future will spring from the attainment, through organisation, by the workers of the world of the one indispensable element of great art—Freedom.

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* Perhaps Unity House—the Home of the National Union of Railwaymen—may acquire such significance. At any rate, it has a more distinctive character than a suite of offices in a great block of similar offices.

† R. A. Cram, *Gothic Quest*, p. 93.

‡ A. Romney Green, *Arts connected with Building*, p. 97.

§ Blomfield, *Presidential Address, R.I.B.A.* 1913, p. 7. "We ourselves are, I believe, slowly moving towards the only possible standpoint in gradually concentrating on the tradition of English architecture of the eighteenth century."

LONDON'S NEEDS.

IT is now some months since the last Report of the Traffic Branch of the Board of Trade appeared, but it is well that some notice of its contents should appear in this JOURNAL. Once again this annual volume (the sixth) takes up the story of London's needs, and takes it up not as a vague cry of discomfort but as a diagnosis. It would be difficult to overrate either the nature of the work upon which Colonel Hellard is engaged or the method upon which that work is conducted. These volumes, which appear so unassumingly, should not be allowed with equal modesty to disappear. Taken as a series, they form a collection of data vital to the study of London's ills and London's remedy.

The Report opens with some general traffic figures, giving striking statistics of the increase both in population and in locomotion. The facts of the last ten years are at least remarkable. It might be supposed that our increased travelling facilities and their use were proportionate to the increase of population. But this is far short of the truth. The population of Greater London has in these ten years increased by less than a sixth, but the number of journeys travelled has been very nearly doubled. In fact, the number of journeys per head of population has risen from 145 to 244.

It is reckoned that by rail alone 400,000 persons enter the metropolitan area every day, and it should be noted that the increase of travel year by year is much greater in the case of tramway and omnibus traffic than in that of the railways. In other words, the road problem is much more acute than the railway problem. It is not surprising in this connection to hear that street accidents are on the increase. During a period in which the population increased 10 per cent. the total number of accidents per annum increased at the rate of nearly 100 per cent.; in fact, "save for a temporary break in 1908 and 1909 the ratio of accidents to population has been steadily increasing." The conclusion derivable from these figures when properly analysed and compared with the statistics of other towns and other countries is that the City of London, as distinct from larger London, is very nearly if not quite the most likely place in the world for a fatal street accident.

Perhaps it is pertinent to reflect that a good many of the people who suffer in street accidents may not be qualified to rank as members of the population of London, and that probably a man (or woman) who is knocked down in the city is more likely to be a country dweller than a unit of the "night population."

But in any case the alarming prevalence of these accidents and their increase are sufficient reasons for giving good heed to the admirable series of precautions (twelve in number) which the Select Committee on Accidents put forward in August of last year.

It is instructive to note that the heavy motor car, though only responsible for one-sixth of the number

of accidents caused by the motor omnibus, is twice as likely to be fatal.

Of all the maps provided in the Report by far the most interesting is that which indicates the town-planning schemes in Greater London. At the first look this map fills the worst pessimist with hope. He there sees that nearly the whole of London is girdled at an average distance of nine miles from the centre by a belt of land about five miles wide over which the word "Town-planning" has at least been breathed. But, alas! a closer scrutiny shows that in the bulk of this area such breathing, or at most loud whispering, is all that has been dared.

There are, as town-planning experts know, eight stages in the birth of a town-planning scheme under the Act. No area among these coloured tracts had, at the date of publication, reached the final glories of the last two stages. Only one had reached the sixth stage; none was in the fifth. The fourth had five representatives, the third one, the second four, and the first as many as ten.

This first stage is merely that of "consideration as to whether a scheme should be prepared"; the second, not much further advanced, is that of expressing "intention to apply for authority to prepare a scheme." Still, large hopes have often small beginnings, and the best aspiration that we can have for London in respect of its "outer ring," its arterial roads and its circuit roads, is that these patches of diagonal hatching may rapidly proceed from shade to shade to the stage of white spots on a blue ground (signifying a draft scheme), thence to pure blue (submission of scheme to Local Government Board), and finally to those penultimate and ultimate levels of accomplishment for which no colour symbols have yet been invented.

In conclusion, I make, for the third year in succession, my suggestion that the Board of Trade should in this series of admirable maps recognise the existence of Hounslow. Its continued absence from these records may mislead the antiquarians of the future, to whom these Reports will undoubtedly prove of supreme interest.

PAUL WATERHOUSE [F.].

NEW BUILDING REGULATIONS FOR PUBLIC ELEMENTARY SCHOOLS.

THE new Building Regulations for Public Elementary Schools, recently issued by the Board of Education, mark a distinct step forward in the right direction, and will be welcomed by architects as a charter of freedom. They present no striking innovation in regard to planning or construction; the keynote being one of guiding principle, rather than of fettering restriction, giving ample latitude for individual expression under varying circumstances of site and local requirement.

In a prefatory note, sympathetic in tone and alien

to the frigid formality of an official document, it is laid down that the Regulations do not constitute a standard to which precise conformity is demanded; but rather a means of securing co-operation between the dominant and servient authorities towards the attainment of a common aim. Although the problem of efficiency combined with economy is ever with us, in the case of a Government department it presents a wider aspect, and, having regard to the present state of public opinion, the Board realise the delicacy of the task of creating, without risk of reaction, a desire for every educational advantage combined with the recognition of æsthetic considerations as a means to this end.

In substance the Regulations are admittedly the outcome of discussion in many quarters. They put into concrete form the unwritten laws which have for some years influenced school planning, and bear alike the impress of the educationalist, the medical officer, and architect, whose assistance is gratefully acknowledged. It is significant of the trend of recent developments that three out of the four principal modifications of the Regulations—viz., design as affected by ventilation, disposition of the buildings on the site, and facilities for physical development—are chiefly due to hygienic considerations; whilst the fourth, the size and organisation of departments, is educational in character.

In form the Regulations are re-modelled under nine headings, each dealing with a separate branch of the subject, co-ordination being secured by the interpolation of cross references. The new arrangement is a great improvement. Congested areas will be the subject of special consideration, and the needs of individual cases will be decided upon their merits. This procedure will also apply, as heretofore, to existing buildings. Reference is made to the Report of the Departmental Committee on the Cost of School Buildings, but no recommendations of general application are put forward as to the adoption of new materials or methods of building. To foster experiment and meet exigencies which may arise the discussion of plans is invited when these are in the preliminary stage.

SITES AND PLAYGROUNDS.

The importance of the site is emphasised by considerable amplification of the Regulations, which are largely influenced by the recommendations of the Departmental Committee on School Playgrounds. In some quarters the proposals have been criticised as a counsel of perfection; in others as too lenient in their requirements. In both cases one is tempted to think that there is the disposition to regard them from a somewhat local standpoint. If it is remembered that the Regulations are intended as the minimum requirement for general application the need of compromise is apparent, and, in the long run, better results are often achieved by the rejection of extreme measures.

One welcomes the suggestions for improving the amenities of the playground, and the co-operation of teachers and scholars might usefully be secured for the purpose with mutual benefit. A necessary warning is given as to the danger of exits on to main roads. There are cases, however, where they are unavoidable, and the barriers suggested are a great safeguard.

The opinion expressed that south-east is the best aspect for class-rooms will be generally endorsed; but the suggestion that, in the warmer parts of England, east may be a better aspect than south needs careful consideration. In practice it has been found in some cases that, owing to the altitude of the sun in summer, a southern aspect is not necessarily a disadvantage in a warm climate if adequate cross ventilation is provided; and further, in spring less inconvenience is caused by prevalent winds.

The old allowance of a quarter of an acre of ground for 250 children is increased by 20 per cent., and the Departmental Committee's recommendations as to playground areas are adopted, subject in both cases to certain reservations. The proposals made by the same Committee in regard to existing playgrounds, although not made requirements, are not lost sight of when plans are submitted for alterations to existing buildings. Stress is rightly laid upon the necessity of due consideration being given to the shape and laying out of playgrounds, a point which has too often escaped notice in the past, and very necessary restrictions are placed upon the use of playgrounds by girls and younger children alternately where it causes disturbance of teaching.

GENERAL ARRANGEMENT OF THE BUILDING.

The division of the school into departments is a question for the Local Education Authority rather than the architect; and although, if properly understood, the information given in Section 18 and Appendix I. is useful, it might easily prove a stumbling-block in the hands of the uninitiated. Suggestions as to planning are wisely non-committal, wherein lies one of their chief merits, but the all-pervading importance in this respect of sunlight and ventilation as it is now understood, is insisted upon. The Central Hall type of school takes its *congé*, and one would also like to have seen restrictions placed upon Central Corridor Schools. The proportion of not less than two class-rooms for every hundred scholars may be thought to err upon the side of leniency, although a certain number of rooms accommodating 48 or 50 scholars undoubtedly gives flexibility in working a department. Plans showing class-rooms arranged so that one or more sides may be thrown completely open are invited, and planning will tend increasingly in this direction. The concluding paragraph "harks back" to the need of economy, and threatens prodigal architects with ruthless penalties. Future enlargements of buildings are very properly to be planned as part of the initial scheme.

ACCOMMODATION.

To the accommodation hitherto included in the Regulations are added class-rooms for practical work, rooms for meals, rooms for the use of the school medical officer, and shower or spray baths. These have already been provided in some of the more recent buildings, but the need of them will vary in different localities.

DETAILS OF VARIOUS PARTS OF THE BUILDING.

The requirement that the landing outside of an external door approached by steps should be between the door and top step is impracticable in exposed situations if rain is to be kept out. The writer has had to alter this arrangement in probably more than a hundred cases in old schools, water in some instances having found its way into rooms 20 or 30 feet from the door. The riser of the top step should be under and flush with the face of the door, and the landing placed between this and the top step of the approach flight. In no case within the writer's knowledge has the adoption of this arrangement led to an accident.

The width of staircases is fixed as not less than 4 feet; if this width is exceeded the provision of a central handrail should be compulsory. A flight of 14 steps is undesirable, but may occasionally be necessary.

Mention of verandahs as means of access to class-rooms appears in the Regulations for the first time.

The use of halls suitably placed for the joint or alternate use at separate times of two departments of older scholars is confirmed, and class-rooms are not to be entered directly from them. The planning of halls for younger children assumes a new aspect, and should be carefully studied.

In regard to class-rooms, complete division of classes taught by adult teachers is made compulsory, and the object of main-rooms, hitherto known as school-rooms, is explained. In small schools they are necessary, but often inconveniently planned.

An important modification is made in the height of class-rooms, which is to be in future not less than 12 feet for rooms with flat ceilings and 10 feet to the slope and 13 feet to the ceiling if ceiled at the collar. If corresponding windows are placed on both sides of the room, 11 feet will be accepted if cross ventilation is satisfactorily arranged. The first two are sound concessions, safeguarded by the requirement that no desk shall be more than 20 feet from a window unless the top of the latter is more than 12 feet from the floor. As to the reduction of height below these limits, there should be no theoretical objection, provided the teacher recognises the moral obligation which it imposes. The human factor in a ventilation scheme is an unknown quantity.

Greater latitude in the position of windows is officially recognised, and the essential features of class-room lighting are clearly stated. Perhaps one may summarize them as even and sufficient light for every desk or table, without pronounced shadows, and windows not facing teachers or scholars. If

these conditions are observed and windows are well placed, it is difficult to see why the use of suitably placed fixed skylights should not in some instances be beneficial if heating surfaces are efficiently distributed. The ratio of one-fifth between floor and glass area is adhered to; surely aspect and surroundings should have some influence in deciding the point. The maximum height of the glass line of windows is fixed at 3 feet 6 inches above the floor, which is beneficial alike to lighting and ventilation.

Attention is rightly called to the necessity of grading the height of desks, and the use of long desks in new schools is abolished. Restrictions as to the number of rows of desks are not directly imposed, but the warning is given that long and narrow rooms are to be avoided.

Rooms for practical work must provide 15 superficial feet of floor area per scholar. The corresponding minimum floor area allowed for handicraft rooms is 30 feet per head, a reduction of 14.4 per cent. This room may in small schools be used also for cookery and laundry work if a small addition is made to the floor area.

The rules as to cookery and laundry rooms are made more comprehensive and definite. It is a requirement that a gas cooking stove shall be accessible on three sides; but it is equally essential and practicable that the coal-range should be similarly placed. Movable tables are recommended, and are certainly more convenient in practice. Rules for combined domestic-subjects centres are added, but do not present any new features.

Rooms for younger children, previously known as infants' rooms, must have a playroom attached; or, alternatively, when the number of children is small, additional floor area as hitherto in one of the rooms. The area per child in the latter case is now fixed at a minimum of 12 square feet.

It is recommended that cupboards should be designed as part of a building—a small but important point.

Subject to the Board's approval, rooms for midday meals may be provided. The need of these only arises in some localities, and the fact must not be lost sight of that they would sometimes be a great boon in remote country schools.

Where rooms for medical inspection are provided it is stated that space for eye-testing is useful.

The anomaly of cloakrooms of equal size for boys and girls is removed by an increase of 50 per cent. in the hanging space for girls' clothes. It is advised that cloakrooms be lighted from the end; but surely equally good lighting and cross ventilation are obtained by sufficient corresponding windows in the two side walls, with the additional advantage that air would tend to move across and not towards the entrances. The number of lavatory basins is fixed at 4 per cent., a proportion which cannot be described as excessive. A not unimportant addition is the reminder that heating chambers need ventilation.

Additional office accommodation for girls is asked for. Stress might have been laid upon the need of separate ingress and egress to urinals. These are often planned as "dead ends," whereas ample space for circulation of scholars is as important as in cloakrooms. It is true that an opening at each end of the screen wall of offices is asked for, but this does not always suffice.

The installation of shower-baths or spray baths is permissible in special cases, and provision of this kind may be substituted for part of the scheduled lavatory accommodation.

Teachers will welcome the addition of bathrooms to their houses.

VENTILATION AND HEATING.

The new regulations as to ventilation follow the now generally accepted lines—viz., cross ventilation by means of windows, and air delivered in cubic feet instead of being doled out in cubic inches. We have moved forward since the time when two square inches of inlet at the end of a dusty tube was alleged to admit sufficient air for one child. Increased ventilation in schools is not feasible without adequate reserves of heat properly distributed, and the new rules provide for this. High-pressure water and steam heating are tabooed, and the use of warm-air grates and stoves is not encouraged. The change of policy in regard to the two latter may cause some soreness among Local Education Authorities, who have been put to considerable expense to meet the late requirements, and have in some cases incurred the displeasure of non-provided school managers by pressing the point.

Windows which face the sun are to be fitted with blinds. This rule will, no doubt, not exclude curtains, of some light, washable material, fitted in two heights and operated by cords. These give better control of the light and interfere less with ventilation.

CONSTRUCTION AND MATERIALS.

There is nothing calling for special comment in this chapter, nor was drastic change anticipated in view of the finding of the Departmental Committee. A minor point, however, is the thickness of stone walls; this, of course, varies in different parts of the kingdom. In those localities of which the writer has had experience 18 inches is the most economical thickness and is ample for stability. If the thickness recommended, 20 inches, is intended to secure dryness, it would in many districts fail to achieve this object, even if the wall were lined with brickwork and pointed in cement, unless an external protective coating were used or the lining was built with a cavity, and the latter is a costly proceeding.

PLANS AND PROCEDURE.

A definition of what constitutes a "New Building" would have been useful, but it is stated that the Board have no power to give an authoritative interpretation. Already disputes have arisen upon the point.

APPENDICES.

Circular 835, with reference to movable partitions, might with advantage have been added as an appendix, as there is no mention in the Regulations of the important points to which it calls attention.

In conclusion, there are two omissions which occur to one. In the first place it is disappointing to find no mention of open-air schools; but being more or less in an experimental stage, it may have been thought undesirable to lay down precise rules regarding them. Then, too, at a time when schools are being increasingly used for continuation classes, rules for artificial lighting would have been useful, especially in view of the attention which has recently been focussed upon the subject and the efforts now being made to effect improvement in this direction.

In expressing our indebtedness to all who by persistent effort have succeeded in placing school planning upon a sound basis under the official aegis, we, as architects, should gratefully acknowledge the initial efforts of the medical profession towards this end. Now that the principles are defined, it rests with us to apply them to the best advantage.

Exeter.

PERCY MORRIS [A.].

STRUCTURAL STEEL.

IT has often been demonstrated that rolled steel shows higher degrees of strength per unit of sectional area in small than in large dimensions, the reason being that in small dimensions it is subjected to a greater amount of working in proportion to its size. Thus, for example, in high-grade steel having an average ultimate tensile resistance of 40 tons per sectional square inch, I have found the resistance per square inch in $\frac{3}{4}$ inch bars about 11.5 per cent. more than in $\frac{3}{2}$ inch bars. But how about mild steel?

Having been engaged for some months past in testing mild steel manufactured by various Scottish firms, I have selected, from nearly 300 tests, eleven made upon steel less than $\frac{3}{4}$ inch thick, and thirty-two made upon steel varying from $\frac{3}{4}$ inch to $1\frac{1}{4}$ inches thick. The results are summarised in the following table:—

Thickness of Samples Tested.	Ultimate Tensile Resistance in Tons per Square Inch.	Percentage of Elongation in 8 inches of Length.
Under $\frac{3}{4}$ in., Highest ...	31.3	27
" " Lowest ...	28.2	20
" " Average ...	29.8	23.2
From $\frac{3}{4}$ in. to $1\frac{1}{4}$ in., Highest ...	30.5	30
" " Lowest ...	28.1	22
" " Average ...	29.6	25.9

So far as this evidence goes, it would appear that no advantage is gained in construction by employing several small-dimensioned members of mild steel in place of a few larger-sized ones, the latter being, of course, more economical.

GEORGE H. BLAGROVE, *Licentiate*.

REVIEWS.

PRESERVATION OF ANCIENT BUILDINGS.

Thirty-seventh Annual Report of the Society for the Protection of Ancient Buildings; and a Paper read by A. C. Benson, Esq., C.V.O., at the General Meeting: June, 1914.

IT is now nearly 40 years since a few well-deserving men, imbued with a right spirit and shocked by the amount of vandalism perpetrated in the guise of restoration, founded the Society for the Protection of Ancient Buildings. Their tersely cogent statement of guiding principles, which was then drawn up, is reprinted in this Report, and time has amply confirmed its wisdom and truth. At first the small band of true prophets was ridiculed without mercy and dubbed by certain leading architects and other pundits of the time the "Anti-Scrape Society." This nickname—bestowed in derision—through increase of knowledge and understanding, has attained an honourable significance, for it condenses into a familiar phrase an important side of the Society's general aim—viz., to preserve the kindly texture and subdued tones that contribute so enormously to the vital appeal of every memorial of departed time.

The Report itself gives an account of the year's work that is remarkable, as showing the good that has been done with all-too-slender pecuniary resources. The outstanding event of the year is the favourable reception given to a deputation from the Society at Lambeth Palace by the Archbishops of Canterbury and York. The chief points urged on this notable occasion were: that a strong case exists for regulating the action of custodians of sacred buildings in all matters of repair and enlargement, that it is highly important to enforce the law which requires that a faculty be obtained before any given work is undertaken, and that it should be seen that the limits of such faculty are strictly defined and faithfully adhered to. The deputation freely granted that the religious uses of their buildings must be the first consideration of ecclesiastical authorities, but suggested the constitution of an advisory board of specially qualified persons to guide and influence in artistic matters those responsible for the fabrics of cathedrals and churches. The fact that the substitution of cautious repair for drastic forms of so-called restoration would mean considerable economy was duly emphasised. Both prelates welcomed the opportunity of hearing the Society's views. The Archbishop of Canterbury, while promising co-operation with the Society so long as the practical objects for which churches exist were in no way hindered, recalled that the shortcomings of the past had been more the work of experts of the last century than of the clerical and lay custodians of the fabrics. There is truth in this, though many architects could relate stories of misguided clerics and lay authorities which would demonstrate that our profession has no monopoly of sin. But recriminations are not to the point. There is every reason to be gratified by the courteous

reception accorded to the deputation by the Archbishops, and we agree with the Committee that nothing but good can come of it.

A few examples of its recent activities will illustrate the beneficent character of the Society's influence, for, though in certain cases the wisdom of their own conceit has caused custodians to run counter to judicious advice, many persons in charge of fabrics needing attention have gladly availed themselves of such assistance as can only be given by those who have knowledge and experience. For instance, the work done at *Norton Church, Suffolk*, in co-operation with the Society, is a splendid example of the patient tenderness and wise conservatism of its methods. We feel sure that an examination of the building after treatment would only support our conviction that the usefulness of the Society cannot be overstated. What was broken has been put together again, and weak places have been unobtrusively strengthened. Nothing is lost that could have been preserved, and the maximum of good has been effected with the least possible intrusion. From *Lavenham* we get a mixed report. The fine old Guildhall, "the most beautiful piece of civil timber architecture in Suffolk," at great expense and with very good intention, has been so drastically restored that all its old-world charm has been completely lost. Two photographs of this building—one before and one after restoration—are given, and we have only to look upon this picture, then on that, to see what a falling-off has been brought about by a well-meant but misguided zeal. But the Parish Council has sought the advice of the Society in regard to the repair of the early 16th-century Market Cross, and this instance of Lavenham's attitude towards the relics of its past is a most hopeful and exhilarating sign. Similarly, at *Dartmouth* the Town Council has taken steps to prevent the tenant from removing and selling the panelling from a house in the Butter Walk, and has thus not only preserved its own for the town it represents, but has prevented the possibly barbarous re-erection of the panels in a strange environment. A brief note and two photographs show how an "improvement" has been carried out at *Chester Cathedral* in total disregard of those principles for which the Society stands. The public authorities at *Lyme Regis* provide an example of those who are not open to receive the light. Notwithstanding two visits to the town made by a member of the Committee, they have hidden their original 14th-century bridge behind a "mock gothic ferro concrete front." However, the old bridge is still there, and will perhaps be seen again when more enlightened successors of these gentlemen remove the concoction which at present obscures it. The short comment on the harm already done to *Oakley Church, Bedfordshire*, and the further mischief that is threatened there, should open our eyes to the need for the kind of vigilance exercised by the Society. It is to be hoped the warning contained therein will not be unheeded in this particular case. Here, as so

often happens, the employment of taste would mean saving money besides preventing violation. Again, by a timely remonstrance, the Society has been endeavouring to save Nos. 55 and 56, *Great Queen Street, W.C.*, which are threatened with demolition for the purpose of extending the Freemasons' Hall. These houses, which are exceptionally fine examples of the street architecture of the 17th century, were originally one. It was occupied by James Boswell in the seventeen-eighties, and earlier by Thomas Hudson, the portrait painter, when Sir Joshua Reynolds was a pupil in his studio. Other tenants were Hooke, the translator of Ariosto and Tasso, and Thomas Worledge, the etcher. The outcome of the Society's protest is doubtful, but it will be a thousand pities if these beautiful houses, with their interesting associations, are sacrificed. We must hope the Freemasons will prove worthy of themselves and their own tradition. Proposals, of a kind which the Society deprecates, have been formulated for works to be done at *Christ Church Priory*, to insert stained glass windows of Mr. Whall's designing in the Lady Chapel and to erect a mock-antique screen at its entrance being among the chief of these. The Society justly commends the excellence of Mr. Whall's glass, but "does not think the chapel would gain by its introduction," and we fully endorse its objection to a "reproduction of any screen of a past period." If a screen is really necessary for the purposes of the church, then obviously something good and *reticent* should be employed. People are very slow to recognise that imitations of a former age are essentially fraudulent, and that it may be better to see the ancient sky through the windows of an old church than to have heaven's light obstructed by devices in coloured glass. The changing hues and the waving of green branches have a sufficient message for the heart that is open to receive it. Finally, at *Torrington Church, Yorkshire*, an architect, who is a member of the Society, reported that he was about to repair the tower. The Society collaborated with him and the work is to be carried out in a manner that is fully approved. Would that all owners of beautiful old buildings could be brought to follow the wise example of this architect, who appreciated the value of sympathetic counsel. The intelligent reader, pondering these typical examples of the Society's invaluable work, will not need to be reminded that every member added to its body increases both its moral weight and its monetary resource. No campaign can successfully be carried on without a united enthusiasm and the sinews of war.

We have little space to speak of the address, on "The Beauty of Age," delivered by Mr. A. C. Benson before the General Meeting, and printed with the Report. In this admirable paper Mr. Benson, with his habitual clarity of language and a penetrating sympathy, brings us very near the inmost secret of Antiquity's peculiar charm. He does not forget that beauty of form which consists in an "inevitable" rightness of line and a due proportion, but he dwells

chiefly on those romantic phases of suggestive beauty which he sums up in the word *Association*. He sees the narrowness and futility of pinning one's faith to some exclusive school, and has nothing to say for those who seek aesthetic or spiritual nourishment from anæmic imitations of the 14th century. But all those qualities of an ancient house that tell of the joys and sorrows, the fallings-out and reconciliations, it has sheltered through succeeding generations, and all those features which speak of the bygone enthusiasms and mortal idiosyncrasies of him who built it, with the expressive additions of subsequent possessors, go straight to his heart. A time-worn church brings thoughts of the continuous life that destiny has gathered round it, of the childish games and diffident courtships its tower has looked tolerantly down upon, and in the background are the marriages and deaths its muniments record, while the grass that surrounds it seems to cover the frailties of those who have found their rest as with a cloak of charity. It is true, as Mr. Benson sanely remarks, that such reflections, over-indulged, may degenerate into a morbid sentimentalism, but in a degree they come to most of us, and undue sensibility is not a conspicuous danger of modern life.

Getting and spending, we lay waste our powers,

and when we remember the humanising influences that proceed from the venerable survivals that enrich our country, we have a deepened sense of the incalculable value of the Society's work and of our obligation to support it to the extent of our power. Mr. Benson has done a great service by so eloquently expounding the meaning and the mystery of *Association*.

In a letter that is printed in the Introduction M. Rodin says:—

Quel dommage que les fils aient défaire les œuvres de leurs pères; mais c'est la vie des vivants. Quel abus de la force de vivre!

This is a sentiment completely in accord with Mr. Benson's ripe and sensitive reflections, and we would earnestly impress it upon all who come within the scope of our influence.

S. PERKINS PICK [F.].

Books received.

- Catalogue of Books relating to Architecture, Construction, and Decoration in the Public Library of the City of Boston. Second Edition, with an additional section on City Planning. Imp. 8s. Boston, 1914. [Published by the Trustees.]
- Bell Towers and Bell-Hanging: An Appeal to Architects. By Sir Arthur Percival Heywood, Bart., M.A. With Contributions by Edwin H. Lewis, M.A., and E. Alexander Young, A.R.I.B.A., and others. 8s. Lond. 1914. 2s. net. [Longmans, Green & Co., 39 Paternoster Row.]
- Transactions of the Edinburgh Architectural Association. Vol. VIII. 8s. Edin. 1914.
- Academy Architecture and Architectural Review. Vol. XLV. 1914. [Alex. Koch & Sons, 44 Doughty Street, W.C.]
- Town Planning for Australia. By George A. Taylor. With 109 Illustrations, and Introduction by John Sulman, F.R.I.B.A. 4s. Sydney, N.S.W. 1914. [Building Limited, 17 Grosvenor Street, Sydney.]
- Board of Education.—Building Regulations for Secondary Schools, being Principles to be observed in Planning and Fitting up New Buildings in England. [His Majesty's Stationery Office.]



9 CONDUIT STREET, LONDON, W., 29th August 1914.

CHRONICLE.

Architects and the War.

A Special Meeting (open to the whole profession) was held at the Institute on Friday, 14th August 1914, at 4.30 p.m., to consider the best way in which the services of architects can be utilised during the war. The President, Mr. Ernest Newton, A.R.A., was in the chair.

The President's letter convening the meeting was in the following terms:—

9 Conduit Street, W., 11th August 1914.

SIR,—The following suggestions have been made to me of ways in which architects could be of assistance at the present time:—

1. By offering their services to the Government, either collectively or individually, in connection with the building, equipment, inspection, and maintenance of temporary barracks, hospitals, etc., or for any other kind of work which they are qualified to perform.

2. By arranging to look after the work of young architects who are already called out, or who contemplate joining the Forces.

3. It has also been suggested that a Subscription List be opened to enable architects to contribute as a body to The Prince of Wales's National Relief Fund.

The Institute is proposing to act in conjunction with the Architectural Association, which is already moving in the matter.

A Meeting will be held at No. 9 Conduit Street on Friday, August 14th, at 4.30 p.m., for the consideration of these and any other suggestions.—I am, Sir, &c.,

ERNEST NEWTON, President.

THE PRESIDENT, in opening the meeting, said: I should like, before we consider the business which has brought us together, to state that, after the numerous communications which I have received, I felt it was necessary to get to work without loss of time. I was, therefore, unable to call the Council together before summoning this meeting, and they will, I feel sure, consider I have done right in not losing time. (Hear, hear.) I am proposing to ask them to meet as early as possible.

The specific services to be suggested under No. 1 of the circular which you have received are intended as indications only. There are, of course, many others, which we as architects can offer, apart from those which we can give as citizens. We can, for instance, offer assistance in regard to the proposed housing and other schemes. It has also been suggested that, subject to the approval of the Council, we might offer our ground-floor galleries. The Architectural Association has already a

good deal of information as to other work which we might do, and I will presently ask the President, Mr. Maurice Webb, to give you an outline of what they are doing.

With regard to No. 2, no explanation is necessary. Many young architects have left their work, with nobody to look after it in their absence, and we must, of course, help them.

I shall presently ask Sir Aston Webb to move No. 3; and I will, therefore, not anticipate him in saying anything about the proposal, except that the Council will be asked to send a donation from the Institute. (Hear, hear.) I have not yet had an opportunity of learning if the Architects' Benevolent Society has adequate funds at its disposal, and whether an appeal for subscriptions should be made.

It will be necessary, in order to carry out these proposals, to appoint a representative Committee, which should have power to add to its numbers, and to form Organising Committees to deal with different branches of the work. I propose to call a meeting of this Committee next Tuesday.

I think it will simplify matters if we have formal resolutions covering suggestions 1, 2, and 3, and the appointment of this Committee, and it will also save time if any gentleman who has suggestions to make will make them briefly now, and then send them at once, in writing, to the Secretary of the Institute, in order that they may be considered by the Committee.

I will ask Mr. Maurice Webb to give the meeting an outline of the valuable work which the Architectural Association has already done, and I shall then ask Mr. Hubbard formally to move the first resolution.

MR. MAURICE WEBB: I should like first, on behalf of the Association, to say that we are anxious to help and assist the Institute as far as we possibly can in any proposals it may bring forward. As regards the actual work which we are doing at the moment, we are endeavouring to get into touch with all men who feel they would like to do something to help at the present time: men who can only give up part of their time, and also men who have tried to join the Territorial forces, but owing to the fullness of their ranks have not been able to get in at present. But we are not able to do anything, and we do not wish to do anything, which will interfere with the regular recruiting, either for the Army, or for the Territorial Forces later on. For this purpose we propose to affiliate ourselves with a central organisation, called the London Volunteer Defence Force, which, I understand, expects shortly to obtain Government recognition. Lord Desborough is the Chairman, and it is supported by a very influential Committee. Their scheme is to start training centres all over London, and we shall form one of those centres for men who can only give up part of their time, having drills and musketry practice every night, and at other times as may be arranged. For men who can give their whole time I hope we shall provide a fuller and better system, and that we shall be able finally to supply a complete company of men who are willing to give their whole services and affiliate themselves with the Artists' Rifles, or with some Engineering Territorial battalion, as soon as we are allowed to go on. But at the present time there is no further recruiting for the Territorials, I understand. For the part-time men we shall have to go on until things develop a little more. At present we have the names of 250 men who are willing to do something, and more are daily coming in.

We have rifle ranges at our disposal, a drill hall and drilling grounds, and we have our own cricket ground at Elstree, which, later, we shall be able to use for week-end camps. As far as the Association goes, I think that is the best side of the work for us to tackle. All men over 30 and up to 45 are eligible; and I hope that later the younger men will be; but at present we cannot drill them if they are eligible for Lord Kitchener's Second Army. In addition, we are endeavouring to help the British Fire-Prevention Committee, for men who are less martial-spirited and who would like to join an Emergency Fire Force and who are versed in fire work and dangerous structure work, for either part time or whole time. I cannot say anything further, except that our Secretary is here, and he has full particulars of what we are doing, and will be pleased to take the names of any who are willing to help us. (Applause.)

THE PRESIDENT: I will now ask Mr. Hubbard formally to move the first resolution.

MR. HUBBARD: The resolution which has been entrusted to me is as follows:

"That this representative meeting of the Architectural Profession offers its services to the Government in whatever capacity they can be most useful at the present time. Also that, subject to the consent of the Council, the R.I.B.A. offers to the Government the use of the Institute's ground-floor galleries; and that an intimation giving effect to these offers be forwarded to the proper quarters." I beg, Sir, to formally move that resolution.

MR. H. W. WILLS: I shall be pleased to second it.

MR. ALAN E. MUNBY: I have been asked by a gentleman who is not able to be present, but who has been a member of the Council for many years, to say that the Institute should take into consideration the fact that by offering services to the Government we may possibly be doing people out of work. The resolution has not been moved quite in the terms in which it is printed; therefore its scope is not as wide. But that is a possible point of view, and I promised to put it forward—namely, that there might be people who have work in hand and whose services might be dispensed with if we made a *carte blanche* offer to the Government.

THE PRESIDENT: The intention is to offer advisory services as far as possible, and to get the Government, if we can, to spread their work, which is done in departments now, amongst those architects who will be very much pinched. We are offering what services the Government may require from us, but we do not wish to take work away from architects, but rather, if possible, to increase it.

A MEMBER: May I ask if we are offering services, or are we asking for work?

THE PRESIDENT: We are offering services.

MR. H. V. LANCHESTER: I support that resolution, and I would like to ask the Chairman to put it.

The resolution was then put and carried unanimously.

THE PRESIDENT: I now call upon Mr. Gotch.

MR. J. ALFRED GOTCH: I have much pleasure in proposing the second resolution: "That the architects who are in a position to assist young architects who are already embodied in or who contemplate joining the Forces, be asked to send their names to the Secretary of the Institute, and state what they are prepared to do." I do not propose to say anything in support of this, because it is so obvious. My view is that, as far as possible, everyone should endeavour to keep things in their normal state. If young architects have gone to join the Colours and left

their business, we ought to depart so far from the normal as to help them as far as we can.

MR. E. GUY DAWBER having seconded, the resolution was put to the meeting and carried unanimously.

THE PRESIDENT: I will now ask Sir Aston Webb to move Resolution No. 3.

SIR ASTON WEBB, R.A.: The resolution I have to propose reads: "That a subscription list be opened to enable architects to contribute as a body to the Prince of Wales's National Relief Fund." The idea is that the Institute should open a fund and receive subscriptions which architects may choose to give, here, instead of sending direct to the Fund. I hope the Institute will give a contribution as from the Institute. Our list will be open for small sums, as small as is wished, and as large as anyone likes. It seems to be the right thing, and is what is being done generally.

MR. LANCHESTER: I will second the resolution. I understand that it says "architects," not necessarily members of the Institute?

SIR ASTON WEBB: Architects; yes, certainly.

THE PRESIDENT: I think Sir Aston Webb has made it quite clear. The idea is that a subscription list should be opened, so that architects may contribute as a body, more or less, and the Institute will be asked to give a donation, too. It answers two purposes: one is to have as large a sum as possible given to the Prince of Wales's Fund—a large sum, we hope; and the other is to enable people who feel they can only give a modest sum, to give it in this way rather than sending it direct. Very often, if a man felt he could only send a small sum, he might hesitate about sending anything at all, and so the Central Fund would lose his subscription; but he would not mind sending it here, because it goes out as a Fund, without names and without amounts—simply a total.

MR. GERALD HORSLEY: I believe there are some members who have already sent subscriptions to the Fund, and I was wondering if those members might be allowed to send in any additional subscriptions they can afford to a fund for the assistance of the wives and families of architects who may require it in their absence at the front.

THE PRESIDENT: Perhaps those cases would be better served from the Architects' Benevolent Society? I do not think it was the intention to ask people to give twice, unless they feel very much disposed to do so. Those who have contributed locally to the Fund, or directly to the Central Fund, would not be expected to contribute again. But I suppose something will be done for the wives and families. I may mention here that I do not know how the Benevolent Society's funds stand at the present moment. Probably an appeal for subscriptions to that fund will be necessary later, and anyone who felt disposed would perhaps like to give to that, instead of giving twice to the Prince of Wales's Fund. If nobody wishes to say any more on that point, I will put that resolution.

MR. KEEN: I suggest there should be a date fixed for the receipt of these subscriptions. If the amount is to be sent in as a lump sum, it should be done by a certain time.

THE PRESIDENT: Do you mean a date after which subscriptions would not be received?

SIR ASTON WEBB: I think it would be a pity to do that. We cannot tell how long the war will last, and we are not specially going to send it as coming from us; it is merely that we all want to help this Fund; we do not want to have a big fund, so as to make a splash; we merely

want to help it as far as possible. And if the necessity increases, I am sure we shall be sending further sums.

THE PRESIDENT: The Fund will be open, and contributions will be made to it from time to time.

MR. R. GOULBURN LOVELL: In all probability we should get a better result and greater unanimity in the ranks if we could know the constitution of the Committee which will deal with this Fund; and if the Council of the Institute can form itself into a Committee—we do not want to call it a War Committee—to deal with emergencies of members of the profession in a broad way, and ask for representatives from other Architectural Societies, from the Licentiate and the unattached members of the profession, we can claim that the Committee represents the whole profession, and we might set to work and ask all architects to do what is set out here, to place our brains and services at the hands of the Government and the Local Authorities. My home is at Eastbourne, and I find ladies interesting themselves in putting up hospitals; if it could be arranged that architects should give their services to help such movements, they could do a great service. When we combine architects on this Committee, I feel we are doing two things: we are uniting the profession, the members of which we are very anxious to get at, and we go forward with a solid front. Therefore I think this subscription should be kept at a minimum fee—half-a-crown if you like—though that would not mean that subscriptions were restricted to that sum. I feel that if the Committee were formed on the lines I suggest, and were handled throughout the country, we might get all the 8,000 architects on the list, each having given 2s. 6d.; and we should have these eight thousand willing to give their services, or to help those who are unable to give services. Therefore the feeling I have in regard to the subscription which is being asked for is that it will depend a great deal on the Committee; and if I am in order, I would move the constitution of the Committee.

THE PRESIDENT: You are scarcely in order in doing that at the present moment. We are on the question of a subscription list being started. The question of the Committee is the next item.

The resolution having been put, was carried unanimously.

THE PRESIDENT: The next resolution I have to propose myself—namely “That a Committee be appointed to deal with the matters connected with the foregoing resolutions, this Committee to have power to add to its numbers, and to form such organising committees as may be required, the Committee to report to the R.I.B.A. Council from time to time.” If anyone will second that I shall be glad.

MR. E. GUY DAWBER seconded.

MR. LANCHESTER: Can we pass that, and then go on to the constitution of the Committee?

THE PRESIDENT: This meeting is so big that if we attempted to constitute a Committee I do not know how long we should be at it. I think if anybody has views with regard to the constitution it would be better that he should give the meeting the benefit of them, and if you will trust me to work in conjunction with the Council in forming a Committee on the lines that, judging from the conversation in this room, I gather that it should be formed, I think that would be the best way of going to work.

SIR ASTON WEBB: I think the best Committee would be formed by yourself, Sir, on the understanding that it is not limited to members of the Institute, but that it will

include representatives from all known Architectural Societies. (Hear, hear.) I feel sure you have the confidence of everyone in this room that you will carry out that duty honourably and to the satisfaction of all of us. I should like to see it placed in your hands. (Loud applause.)

THE PRESIDENT: That is putting a great responsibility on me, but I will undertake to do the best I can, with the assistance of my Council. I will, therefore, put that resolution, which I have proposed from the chair, and which Mr. Dawber has seconded.

MR. LANCHESTER: That does not preclude the appointment of outside architects?

THE PRESIDENT: No.

The resolution was carried unanimously.

MR. EDWARD P. WARREN: I ask if the Committee, in drafting the offer to the Government, will specify, for the benefit of the War Office, the kind of service that our members could render, because some of them have special experience in various directions: some in connection with hospitals and barracks, for instance—which would make them useful in connection with such buildings, and others in connection with engineering—so if some kind of classification could be made, it would be useful in sending the offer to the War Office. Before your intimation arrived, I had sent in my name to the War Office with regard to temporary hospitals and the conversion of buildings, because I happen to have had some experience in that kind of work; and I have also a little *locus standi* in being an officer of the National Reserve. I received a polite intimation of thanks for the offer, saying it had been noted. I have not, so far, heard anything further. Unless some definite statement is made as to the kind of service to be rendered, the offer may not receive the attention it should.

THE PRESIDENT: I have already received several valuable suggestions. In the early part of the meeting I asked anybody who had suggestions to send them in writing to the Secretary of the Institute, so that they may be considered by the Organising Committee. They will then make a *précis*, and form lists of men who are able to do certain works, and specify the works which they will undertake to do. An intimation to that effect will be forwarded with the offer of services.

MR. LANCHESTER: I think probably one of the first duties of the Organising Committee will be to circularise architects throughout the country; and we might take advantage of that circularising to ask them in what form they would like their names to be put down.

THE PRESIDENT: I cannot say exactly in what way the Committee would work, but I imagine it would work in that way: to circularise people, or ask the building papers to insert a notice. Of course, we shall take steps to give full information. We shall not rely upon people writing; they might forget it. I am much obliged to you all for attending this meeting.

The meeting then terminated.

The Architects' War Committee.

The first meeting of the Architects' War Committee was held on Tuesday, 18th August 1914. There were present Messrs. Walter Cave, Thomas E. Colcutt, G. Leonard Elkington, Claude Ferrier, H. M. Fletcher, L. Rome Guthrie, Edwin T. Hall, Gerald C. Horsley, Sir Thomas Jackson, Bart., Ralph Knott,

H. V. Lanchester, Col. F. S. Leslie, R. Goulburn Lovell, Edwin L. Lutyens, Sir Alexander Stenning, Sir Henry Tanner, Percy B. Tubbs, Paul Waterhouse, Adam F. Watson, Sir Aston Webb, Maurice E. Webb, John E. Yerbury, C. Stanley Peach (*Hon. Secretary*), and Ian MacAlister (*Secretary*). In the unavoidable absence of the President, Mr. Ernest Newton, R.A., owing to a domestic bereavement, Mr. H. V. Lanchester took the Chair.

Membership of the Committee.—The Chairman stated, on behalf of Mr. Ernest Newton, that in accordance with the Resolutions passed at the representative meeting of architects held at the Institute on 14th August, the following gentlemen had been invited to serve upon the Committee:—

R.I.B.A.: Mr. Ernest Newton, A.R.A., President; Messrs. A. W. S. Cross, George Hubbard, F.S.A., H. V. Lanchester, and J. Alfred Gatch, F.S.A., Vice-Presidents; E. Guy Dawber, Hon. Secretary.

Presidents of Allied Societies.—Messrs. A. H. L. MacKinnon (Aberdeen Society of Architects), G. Salway Nicol (Birmingham Architectural Association), G. C. Awdry (Bristol Society of Architects), J. Archibald Lucas (Devon and Exeter Architectural Society), G. P. K. Young (Dundee Institute of Architects), T. Forbes MacLennan (Edinburgh Architectural Association), John Watson (Glasgow Institute of Architects), Sir William Portal, Bart. (Hampshire and Isle of Wight Association of Architects), R. Caulfield Orpen, A.R.E.A. (Royal Institute of the Architects of Ireland), Albert E. Kirk (Leeds and Yorkshire Architectural Society), W. A. Catlow (Leicester and Leicestershire Society of Architects), J. Alfred Gatch, F.S.A. (Northamptonshire Association of Architects), R. Burns Dick (Northern Architectural Society), A. F. Watson (Sheffield Society of Architects), Glendinning Moxham (South Wales Institute of Architects).

Architectural Association.—Mr. Maurice E. Webb, President; Messrs. H. Anstey Hall and G. Leonard Elkington, Vice-Presidents; Mr. H. P. Fletcher, Hon. Secretary.

Society of Architects.—Mr. Percy B. Tubbs, President; Messrs. E. C. P. Monson and R. Goulburn Lovell, Vice-Presidents; Col. F. S. Leslie, R.E., Hon. Secretary.

Messrs. T. W. Aldwinckle, J. Macvicar Anderson, Herbert Baker, Reginald Bloomfield, R.A., Walter Brierley, F.S.A., Sir John Burnet, R.S.A., Messrs. Walter Cave, Basil Champneys, H. Chatfield Clarke, Max Clarke, Thomas E. Colcutt, T. Edwin Cooper, Claude W. Ferrier, the Earl Ferrers, F.S.A., H. L. Florence, Sir Ernest George, A.R.A., Messrs. W. Curtis Green, L. Rome Guthrie, Edwin T. Hall, Henry T. Hare, G. T. Hine, Gerald Horsley, Sir Thomas Jackson, Bart., R.A., Mr. Ralph Knott, Sir Robert Lorimer, A.R.S.A., Messrs. Edwin L. Lutyens, A.R.A., C. Stanley Peach, Sydney Perks, F.S.A., W. E. Riley, John Slater, Lewis Solomon, Sir Alexander Stenning, Mr. Leonard Stokes, Sir Henry Tanner, C.B., Mr. Paul Waterhouse, Sir Aston Webb, C.B., E.C.V.O., R.A.; Messrs. Wm. Woodward, John E. Yerbury, Ian MacAlister, Secretary.

Messages were read from the following gentlemen regretting their inability to accept the invitation:—Messrs. H. B. Measures, F. B. Dunkerley, Gilbert Fraser, Sir William Emerson, A. B. Burleigh.

It was thereupon RESOLVED that the following gentlemen be also invited to serve upon the Committee:—Messrs. J. E. Still, F. H. Wrench, Walter Gordon, Geoffrey Norman, S. D. Topley, H. A. Welch, Herbert Shepherd, W. Alban Scott, T. Wallis.

Name of Committee.—It was RESOLVED that the Committee be called "The Architects' War Committee."

Officers of the Committee.—It was RESOLVED that the

following members of the Committee be appointed as Honorary Officers:—*Chairman*, Mr. Ernest Newton, A.R.A.; *Vice-Chairmen*, Messrs. George Hubbard and Percy B. Tubbs; *Hon. Secretary*, Mr. C. Stanley Peach.

Work of the Committee.—The Secretary submitted to the Committee the following Resolutions passed at the representative meeting of the profession on 14th August:—

1. RESOLVED, that this representative meeting of the architectural profession offers its services to the Government in whatever capacity they can be most useful at the present time. Also that, subject to the consent of the Council, the R.I.B.A. offers to the Government the use of the Institute's ground floor galleries; and that an intimation giving effect to these offers be forwarded to the proper quarters.
2. RESOLVED, that the architects who are in a position to assist young architects who are already embodied in, or who contemplate joining the forces, be asked to send their names to the Secretary of the Institute, and state what they are prepared to do.
3. RESOLVED, that a subscription list be opened to enable architects to contribute as a body to the Prince of Wales's National Relief Fund.
4. RESOLVED, that a Committee be appointed to deal with the matters connected with the foregoing Resolutions, this Committee to have power to add to its numbers, and to form such organising Committees as may be required, the Committee to report to the R.I.B.A. Council from time to time.
5. RESOLVED, that the President of the R.I.B.A. be empowered to form the Committee.

The Chairman stated, on behalf of Mr. Newton, that the question of the use of the R.I.B.A. Galleries would be discussed at a meeting of the R.I.B.A. Council the same afternoon. He also read the following communication from Mr. Newton:—

"I hope to have an interview at an early date with Mr. Herbert Samuel, M.P., to discuss the question of the special employment of architects during the War. Mr. Samuel has already informed me that he will be glad to avail himself of our services if occasion arises.

"With regard to Resolution No. 3: I propose this afternoon to ask the Council of the Institute to make a substantial donation immediately to the Prince of Wales's Fund.

"With regard to the distress which may arise in the profession owing to the war, I propose to summon a Special Meeting of the Architects' Benevolent Society Council to consider the situation, and, if it is found necessary, to send out a special appeal to the profession to contribute to a Special War Relief Fund for the benefit of architects and those dependent upon them who may be in difficulties owing to the war."

Appointment of Executive and General Purposes Committee.—It was RESOLVED, that the following gentlemen be invited to act as an Executive and General Purposes Committee, with power to add to their numbers:—*Chairman*, the President; *Vice-Chairmen*, Messrs. George Hubbard and Percy B. Tubbs; *Hon. Secretary*, Mr. C. Stanley Peach; Messrs. H. V. Lanchester, J. Alfred Gatch, Maurice Webb, H. Chatfield Clarke, Claude Ferrier, Edwin T. Hall, Sir Aston Webb, W. E. Riley, Ralph Knott, L. Rome Guthrie, Paul Waterhouse, E. T. Richmond, H. M. Fletcher; and all the provincial members of the General Committee to act as Correspondents for the Executive Committee. It was RESOLVED, that all suggestions received from architects and others with regard to the action to be taken by the profession

should be referred in the first instance to this Committee for consideration.

The Chairman stated that it was proposed to ask the Institute Council to afford all the necessary secretarial and clerical assistance to the Architects' War Committee and its Sub-Committees.

Resolution No. 1.—It was **RESOLVED**, that the Executive and General Purposes Committee be instructed to draft and despatch to the Rt. Hon. J. Pease, M.P., who has been entrusted by the Cabinet with the duty of receiving all offers of assistance in connection with the war, a letter embodying the general offer of help expressed in the Resolutions.

Resolution No. 2.—It was **RESOLVED**, that the following gentlemen be invited to act as a Selection Sub-Committee or Sub-Committees with power to add to their numbers:—Sir John Burnet, Sir Aston Webb, Mr. J. Alfred Gotch, Col. F. S. Leslie, Messrs. E. Guy Dawber, G. Leonard Elkington, Reginald Blomfield, Max Clarke, H. A. Welch, Sydney Perks, T. Edwin Cooper, Wm. Woodward, John E. Yerbury, Henry T. Hare, G. T. Hine, John Slater, R. Goulburn Lovell, Gerald C. Horsley, Alan E. Munby, and all the provincial members of the General Committee to act as Correspondents for the Selection Sub-Committee. It was **RESOLVED**, that the following memorandum prepared by the Chairman be adopted as a basis for the work of this Sub-Committee, which should report to the Executive and General Purposes Committee:—

"This Sub-Committee would be asked to compile lists of architects, with particulars of their qualifications, so that we may be in a position to give useful information to the Government or to any of its departments in connection with emergencies arising out of the war.

"The Sub-Committee would also act as an Information Bureau to help young architects who are called out for service in the manner suggested by Resolution No. 2.

"In doing their work the Sub-Committee would be largely guided by the advice and knowledge of the provincial members of the General Committee, who would be asked to act as its Correspondents in dealing with applications from various districts."

Resolution No. 3.—It was **RESOLVED**, that the Executive and General Purposes Committee be instructed to open a subscription list to enable architects to contribute as a body to (a) the Prince of Wales's National Relief Fund, or (b) a Special Fund.

Benevolent Sub-Committee.—It was **RESOLVED**, that the following gentlemen be invited to act as a Benevolent Sub-Committee, with power to add to their numbers:—Sir Robert Lorimer, Sir Alexander Stenning, Sir Ernest George, Sir Henry Tanner, Sir Thomas Jackson, Messrs. A. W. S. Cross, H. W. Wills, H. Austen Hall, H. M. Fletcher, E. C. P. Monson, Herbert Baker, Walter Cave, Thomas E. Colclough, Edwin L. Lutyens, Leonard Stokes; and all provincial members of the General Committee to act as Correspondents for the Benevolent Sub-Committee.

Military Training.—The Acting-Chairman stated that, after consultation with the War Office, the Architectural Association had decided for the present to take no action in regard to their military training proposals.

Executive and General Purposes Committee.—It was finally **RESOLVED**, that the Executive and General Purposes Committee be requested to consider the following points:—

(A) The desirability of issuing to the profession or to the public an appeal to carry on building work to the utmost extent during the progress of the war.

(B) The desirability of urging the Government to make arrangements to allow the railways to carry building materials.

The Council of the Institute, at a meeting held later in the day, passed a resolution that a donation of one hundred guineas should be made to the Prince of Wales's National Relief Fund.

With regard to the suggestion in the second part of Resolution No. 1, the Council came to the conclusion that as it is their aim to carry on the work of the Institute as usual, and the entire premises are needed for this purpose, they did not think it advisable to offer the Galleries to the Government for military use.

War Contingencies: Proposed Endorsement of Tenders.

A circular letter in the following terms has been addressed by the Institute of Builders to master-builders and various bodies engaged in the building trade:—

"In view of the international crisis now existing, and of the inability to foresee what may happen, it has been decided to advise that in all future building undertakings members should endorse all their tenders with the following proviso:—

"This tender is based upon the normal rates of wages and materials prevailing prior to the 4th August 1914, and any advance in cost of labour or material to be added to the amount of the contract, upon satisfactory proof being given of such increase. Any difficulty or delay in obtaining labour or material to be the subject of a reasonable extension of time."

"It is with no desire to secure increased prices or to take advantage of the present crisis that this recommendation is made, but as a precaution against possible eventualities which I am sure you will appreciate."

The Institute of Builders having sent a copy of the above letter to the R.I.B.A. and expressed the hope that it would meet with the approval of members, the Council have replied that the R.I.B.A. could not agree to a circular in such vague terms as the one under consideration, which would not afford building owners any reasonable guarantee either as regards cost or time of completion. The Council add that they have no doubt that individual architects will do their best to induce their clients to appreciate the position of the builders.

Members with the Services: Names wanted.

It is desired to place on record in the JOURNAL the names of Members and Licentiates of the Institute who have responded to the call of duty and are serving with the Regular or Territorial forces of the country. Members, or non-members, who are able to supply information on the point are requested to send particulars to The Secretary R.I.B.A., 9 Conduit Street, London, W.

Count Plunkett [Hon. A.], Director of the National Museum of Ireland, has joined the Irish Volunteers,

and has authorised many members of his Museum staff to enter for a course of military engineering in the Royal College of Science, Dublin.

Government Building Work and the War.

The following communication has been received from the First Commissioner of His Majesty's Works:—It appears from various inquiries addressed to the Commissioners of Works that there exists some apprehension lest unemployment should be increased in the building and other trades by suspension during the present crisis of building and engineering operations provided for in the estimates of the Office of Works recently approved by Parliament. It is, therefore, desirable to state publicly at once that it is the intention of the Commissioners of Works to proceed with all services in their charge, to employ as many men as possible to carry out such services, and to develop and expedite their building programme in any way practicable. As the Minister mainly responsible for Government building, the First Commissioner of Works would wish to take this opportunity of expressing his sincere hope that private individuals, companies, firms, and contractors will spare no effort to follow the policy of the Government in this matter, so far as circumstances admit.

The Great Western Road.

The Middlesex County Council have decided to proceed immediately with the construction of the Great Western Road. Direct labour will be employed as far as possible. The Council has also decided to put in hand improvements to road surfaces, and to begin the erection of a new sanatorium without delay. The Great Western road, which is to be 80 feet wide and between five and six miles in length, will connect Chiswick High Road with the main Bath Road near Lavender Cottage *via* Brentford, Lampton, and Sutton. It will cost about half a million sterling, of which 75 per cent. will be provided by the Road Board, and a time-limit of seven years is allowed for its construction.

Architects and Relief Works.

Mr. C. H. B. Quennell [F.], writing to *The Architect's and Builder's Journal* with reference to the relief works now in contemplation, says:—

The Government should be advised that architects need a certain amount of sustenance, and be asked, where possible, to employ architects on relief works.

There is a great danger at the moment that local authorities may start building cottages without any thought of the town-planning side of the question. It is quite conceivable that two or three fields will be bought and cottages built wholesale and without any regard for the amenities of the district. Panic building now without any consideration for all that is held to be meant by town-planning can only result in slums for the future.

In the Report which was issued by the Departmental Committee appointed by the President of the Board of Agriculture to report on buildings for small holdings, this was very evident. The main endeavour was to find the model plan for a cottage. This was assiduously sought from landlords, architects, and agents, and the keynote of their endeavour was to get a sort

of stencil plate for a cottage which could be rubbed off and produced in large quantities by any official.

The Report takes no heed of the town-planning sides, and makes no note of newer forms of traction which may alter conditions. It does not realise that these altered conditions may so change the mode of life that the stock pattern cottage may not be suitable in a few years.

There is a great danger that this Report will be adopted and cottages built wholesale; meanwhile the architect, having given his plans, may find his occupation gone.

Tattershall Castle.

Lord Curzon of Kedleston [Hon. F.] formally opened Tattershall Castle, Lincolnshire, on Saturday, the 8th inst., when some two hundred guests, among whom were Sir Henry Howorth, President of the Royal Archaeological Society, Lord Brownlow, Lord Winchilsea, Sir W. St. John Hope, and Mr. J. A. Gotch, F.S.A., representing the Institute, inspected the Castle under Lord Curzon's leadership. In welcoming the company in the Guard House, Lord Curzon explained his purchase of the Castle and the object of its restoration as an ultimate gift to the nation and the public, and paid a high tribute to the skill of his architect, Mr. William Weir, in carrying out the work of restoration.

It will be remembered that three years ago the public learned with a shock that the famous old landmark of the fens had been purchased by an American, whose intention it was to remove it carefully, stone by stone, and re-erect it in its original state on the other side of the Atlantic. Demolition had so far begun in September 1911 that the celebrated fireplaces—for which, it is said, the American had paid £2,800—were actually conveyed by road to Tilbury, *en route* for the United States. The building seemed doomed when at the last moment, in November 1911, Lord Curzon came to the rescue and purchased the Castle. In May 1912 he also obtained possession of the fireplaces, which, after lying at Tilbury for over eight months, were restored to the Castle on the 5th June in that year. Speaking on that occasion, Lord Curzon said that they proposed excavating the whole of the Castle area in order to discover as far as possible what was there before, but he had no intention of rebuilding anything that was gone. The keep was almost the only structure that remained, but all about the inner walls were buildings of various descriptions constituting one of the greatest mansions in that part of England. We have it from records that the builder of the Castle, Sir Ralph Cromwell, Treasurer of the Exchequer to Henry VII., rode abroad with 120 men and lived with 100 personal retainers at Tattershall, which means that he was surrounded with great circumstance of pomp and position.

The work of restoration has taken two and a half years to complete. Both the moats, which had been filled in, have been re-excavated and connected with the local canal, whilst the fabric of the Castle, which was in partial ruin, has been completely overhauled and made safe, and floors have been put in in each of the four stories. The mantelpieces have been restored

to their niches, the mullions and traceries of the windows and glass put in.

Lord Curzon has earned the gratitude of us all for his public-spirited action in preserving for the use of the nation this precious relic of a fortress-residence of the Tudor period.

The New Professor of Architecture at the Massachusetts Institute.

Mr. Ralph Adams Cram, of the firm of Cram & Ferguson (formerly Cram, Goodhue & Ferguson), of Boston, U.S.A., who was recently elected Hon. Corresponding Member of the Royal Institute, has been appointed senior Professor of Architecture at the Massachusetts Institute of Technology. Members will recall the brilliant Paper, with its fine series of lantern illustrations, on "Recent University Architecture in the United States," which Mr. Cram crossed the Atlantic expressly to deliver before the Institute some two years ago [JOURNAL, 25th May 1912].

Mr. Cram, amid the claims of a large and exacting practice, has always taken a keen interest in the architectural education movement. While at the Massachusetts Institute he will continue the active practice of his profession, and his presence in so important a position on the faculty will enable the school to keep in close touch with the problems of the day and the needs of the profession. The majority of the architectural teaching staff have graduated from the Ecole des Beaux-Arts or from the Massachusetts Institute itself, which has carried on the best traditions of the famous French school with such modifications as were necessary to meet the differing conditions of the country. Many years ago Mr. Cram was credited with a critical attitude towards the methods of the French school. During the last ten years, however, he has devoted a great deal of attention to the problem of architectural education, and his investigations have brought him more and more into harmony with the system of the Beaux-Arts, leaving him, however, sufficiently alive to its possible defects to safeguard him from following its traditions blindly. For the past six years he has been Chairman of the Committee on Education of the American Institute of Architects, and is well informed on the teaching conditions of the country. Discussing his policy in his new sphere of action, Mr. Cram gave it as his opinion that there should be constant communication between the educational authority and the leading members of the architectural profession, and particularly with the American Institute of Architects, as to the essentials demanded by the practice of the day. Education, to be worthy of its purposes, must satisfy these essentials, and it should be cognisant of the best tendencies of the profession as expressed through the leading members in the country of all schools of design.

The extent of Mr. Cram's practice is of interest in connection with his new appointment. His firm have specialised in school and ecclesiastical architecture, and their buildings grace many a landscape on the

North American Continent. At Princeton, where Mr. Cram is supervising architect, his special works have been the Graduate College and the Cleveland Tower, which have cost some £150,000. The firm are responsible for the splendid new quarters of the Military College at West Point [*ibid.*, pp. 515-517]; of the buildings erecting one after another for the Price Institute at Houston, Texas, to cost about £1,250,000; of the Women's College at Sweet Briar, Virginia, of Phillips Exeter, and of the Taft School, Connecticut. Their church buildings are very numerous and among the best known in the States. For two years Mr. Cram has personally been the consulting architect of the Cathedral of St. John the Divine, while the entire work of the nave (costing over £200,000), the Synod House, Bishop's House, Deanery, and a chapel of the chevet are by his firm. The most "sensational" of their churches (to quote an American paper) is St. Thomas's, the largest and most costly parish church in the world, the expenditure so far having run into nearly £250,000. Then there are, to mention buildings only of the first rank, the Halifax Cathedral, Detroit Cathedral, the Pro-Cathedral, Havana, and the Cathedral Church at Toronto, now under construction.

Despite the stress of professional work Mr. Cram has found time for the exercise of his literary talent. He has been a frequent contributor to magazines and reviews and has published the following books:—*Black Spirits and White* (1901), *Church Building* (1901), *The Ruined Abbeys of Great Britain* (1906), *The Gothic Quest* (1907), *Excalibur*, and *The Ministry of Art*, recently issued.

University of London: Appointment to the New Chair of Town Planning.

Professor S. D. Adshead, M.A. [F.], has been appointed as from 1st September 1914 to the University part-time Chair of Town-Planning, tenable at University College. Since 1909 Mr. Adshead has been Professor of Town-Planning at Liverpool. He was the author, in 1910, of the scheme for the reconstruction of the Duchy of Cornwall estates in South London, and has been concerned with town-planning operations at Birkenhead, Wolverhampton, and other towns.

The Chair of Town-Planning is associated with the University Department of Architecture, of which Professor F. M. Simpson [F.] is Director; and the engineering aspects of town-planning will be dealt with by the recently appointed Chadwick Professor of Municipal Engineering, Mr. E. R. Matthews, A.M.Inst.C.E.

It will be remembered that new and convenient buildings have recently been provided for the Department on the north-west front of University College.

Roman and Post-Roman London.

Professor F. HAVERFIELD writes:—

On the 6th April last, Mr. W. R. Davidge [A.] read to the Institute a Paper on the Development of

London, which is printed in the *JOURNAL* of the 11th April. That Paper was concerned mainly with mediæval and modern, and indeed future London, but it opened with an interesting conjecture about Roman London. Mr. Davidge argued that it was possible to trace in the streets of the city of to-day some vestiges of a rectangular town-planning such as characterised many ancient cities, and such as I had recently described in my work on *Ancient Town Planning* (Oxford, 1914). In the course of the discussion which followed the reading of the paper, I said that I should like to take time to consider Mr. Davidge's views, which were entirely new to me, and to compare them with the details of recorded discoveries in London. It was obvious that everything depended on whether Roman structural remains had ever been found underlying the streets which Mr. Davidge had selected as preserving Roman lines. If they had, these streets could not really be identical in course with any Roman thoroughfares; with this point Mr. Davidge had not dealt, and it was not possible to deal with it without reference to books. I have now inquired into the matter further and find myself unable to accept Mr. Davidge's theory. His suggested Roman streets are few, Cheapside with Poultry, Cannon Street and—for a north and south road—the way up from old London Bridge into Gracechurch Street. Now Cheapside appears, from the details given in the *Victoria History of London*, to have yielded a Roman pavement from the middle of its course, and though Wren says he unearthed a "causeway" 4 ft. thick and 18 ft. deep below the site of the present tower of St. Mary-le-Bow, it is not at all clear that this was a Roman street, especially as it seems to have lain under or somehow belonged to a Roman building which Wren took to be a temple or the like. The east end of Cannon Street seems also to cross sites of Roman structures, and the same seems true of Gracechurch Street. Mr. Davidge further refers to a chalk pavement found in 1786 in Birchin Lane, which he takes to be a continuation of the Roman Cheapside. But it is not so plain that this chalk pavement—not itself a good road material—is the remain of a road of any sort. For the rest, Mr. Davidge's supposed traces of a chessboard pattern of Roman streets coincides nowhere to any real extent with the lines of later streets. Nor, let me add, do they seem to end in known Roman gates in the Roman walls round Londinium, except in one solitary case. Now if one gate had stood awry, we could excuse it, if (as is likely) the walls of Londinium were built rather late in the history of the Roman town—just as we excuse the Porta Nigra at Trier, the east gate at Silchester, the north gate at Caerwent (see my *Ancient Town Planning*, pp. 126-133). But when all but one stand awry, it is a different story. On the whole, I conclude that Mr. Davidge has not made out his case either for a regular street pattern or for a survival of any Roman street in the modern thoroughfares of London.

Such a survival may possibly be detected some day, though it does not seem very likely; such a pattern may well have existed. At present we have no certain knowledge of either.—F. HAVERFIELD.

OBITUARY.

Frederick Dare Clapham.—Many members of the profession will have read with the deepest regret the account of the terribly sudden and tragic end of Frederick Dare Clapham, to which reference was made in the last issue. A man of many activities, Clapham was perhaps better known to us in connection with the work of the Architectural Association; whether you made his acquaintance when he was carrying out the duties of Vice-President of that body, or serving as an ordinary member of their Council, or actively engaged in furthering their annual excursion, their dinners, or their plays, you always found that whenever Clapham undertook to do a thing you could rely on its being done to the best of his ability. It was this quality of his that must have caused him to be of the greatest service to the late Mr. E. W. Mountford, in whose office several of the most important years of his architectural career were passed. Starting at first as Mr. Mountford's assistant, it fell to his lot to carry to a conclusion, while his principal was incapacitated through illness, many of the very important works then being carried out in that office, and it is in this respect that he will be remembered in connection with such buildings as the new Old Bailey, the Lancaster Town Hall, &c. Later Mr. Mountford made him a partner, and on his death Clapham continued to carry on the practice. Before going to Mr. Mountford, Clapham was a pupil of Mr. E. J. May, though his first experiences of architecture were gained in the office of the late Mr. Norman Shaw, where he went for a "trial trip." Later he carried out the Public Library at Kingston-upon-Thames in conjunction with Mr. Alfred Cox, and the design that he prepared in collaboration with Mr. Henry Tanner, jun., in the competition for the new University Buildings at Belfast was one of those premiated. He also carried out, amongst other works, the Library of the Battersea Polytechnic and a mausoleum in the cemetery at Putney. Latterly he had not perhaps always the best of luck, and he put in for and was one of those selected for the post of City Surveyor of Calcutta. However, he remained in England and entered into partnership with Mr. Symons Jeune. Their association was assuming a distinctly promising aspect when there occurred the unfortunate accident that took him from amongst us at the early age of 41. All who knew him, and there were many, will join with us in a genuine expression of regret at his untimely death.—PERCY W. LOVELL [A.].

M. Charles Mewès.—The death occurred in Paris on the 10th inst. of M. Charles Mewès, Architecte Diplômé, Arbitre près le Tribunal de Commerce,

S.C., Chevalier de la Légion d'Honneur. M. Mewès was senior partner in the firm of Messrs. Mewès & Davis, architects, of 39 Maddox Street, Hanover Square. He also practised in Paris and Cologne, in the latter town being in partnership with M. Alphonse Bischoff. With Mr. Arthur J. Davis [F.] he was responsible, among other works, for the following buildings, &c., in England: Ritz Hotel, Piccadilly; *Morning Post* Offices, Strand; Royal Automobile Club, Pall Mall (Mr. E. Keynes Purchase [F.] was joint architect for this building); decoration of the Cunard liner *Aquitania*; Consulting Architect to the Cunard Steamship Co., for their new building in Liverpool; decoration of the S.S. *Amerika*, for the Hamburg-Amerika Line; New Theatre and Boxing Hall for the National Sporting Club; Cavalry Club, Piccadilly (Extension); Cunard Steamship Company's Offices, Cockspur Street; Carlton Hotel, remodelling and decorating interior; Hyde Park Hotel, internal alterations and decorations; extensive alterations and decorations at 1 Belgrave Square, S.W., for Mr. W. Koch; 49 Belgrave Square, for Mr. Otto Beit; 8 Grosvenor Square, for the Hon. Henry Coventry; 27 Grosvenor Square, for Mr. Robert Fleming; 18 Grosvenor Square, for Mrs. John Astor; Luton Hoo, Luton, for the late Sir Julius Wernher; Polesden Lacey, Dorking, for the Hon. Mrs. Ronald Greville; Coombe Court, Kingston Hill, Surrey, for the Marquis of Ripon; Glanusk Park, Brecon, for Lord Glanusk. Also decorative work at 11 Portman Square, W., for the Duke of Beaufort; 27 Portman Square, W., for Mr. Ernest Cunard; Stafford House, for the Countess of Stafford. M. Mewès also executed important works from his offices in Paris and Cologne, and in Spain in conjunction with M. Landecho. In Cologne, in partnership with M. Bischoff, he was responsible for the fitting and decoration of the Hamburg-Amerika liners *Kaiserin*, *Augusta*, *Imperator*, and *Vaterland*.

Mr. John Brooke, of Manchester, who died at his residence, The Hive, Bowden, on the 1st August, in his 61st year, was elected an Associate of the Institute in 1881 and Fellow in 1908. He was President of the Manchester Society of Architects in the sessional years 1912-14, and during this period represented his Society on the Council of the Institute. Mr. Brooke served his articles with Mr. Frederick Bakewell, of Nottingham, being a fellow-pupil with Mr. A. N. Bromley [F.]. As a student of the Nottingham School of Art, his work in architectural design was selected for exhibition in the national competition, and he carried off a local prize offered by the Nottingham Corporation for architectural design. He began practice in 1876, being for five years in partnership with Messrs. Corbett & Sons, of Manchester, and afterwards for three years with Mr. A. H. Davies-Colley [A.]. He then started in independent practice, which in course of time extended from Manchester and neighbourhood to Cheshire, Shropshire, Staffordshire, Leicester-

shire, Nottinghamshire, Northamptonshire, Yorkshire, Lancashire, Durham, Kent, and Surrey. His work was very varied in scope, including country houses, both restorations and new work, churches, parsonages and schoolhouses, almshouses and houses of rest, hospitals and commercial buildings. Among important works may be mentioned Ollerton Grange, Knutsford; Edinscourt House, Disley; the new principal entrance gateway and lodge at Welbeck Abbey, for the Duke of Portland; Albion Church, Ashton-under-Lyne; Handford Parish Church; St. George's Vicarage, Mossley; Deansgate Arcade, consisting of a large number of shops and other premises; almshouses at Welbeck; the Godfrey Ermen Home of Rest for the Blind, Southport; premises for the Manchester Diocesan Church House Company, comprising a hall with more than a thousand sittings, church and ladies' clubs, offices for the diocesan and kindred societies, council, committee and other rooms; Holdsworth Hall and Church House, Manchester. He was joint architect with Mr. Edwin T. Hall [F.] of the Manchester New Infirmary, their designs being selected by Sir John Burnet as assessor from among those submitted by twelve nominated architects. In 1912 Mr. Brooke took into partnership Mr. C. Ernest Elecock [F.]. Under the style of Messrs. John Brooke & Elecock, practising at 18 Exchange Street, Manchester, the firm were the architects of the new Town Hall and Market buildings now erecting at Denbigh, and they were awarded the second premium for their designs for the Liverpool Sanatorium for Tuberculosis.

Mr. Arthur Charles Bulmer Booth, whose death occurred on the 17th July, aged 70, was for many years a partner in the late firm of Hudson & Booth. He was a pupil of the late Joseph Springbolt, and afterwards entered the office of the late Professor Aitchison, R.A., as assistant, where he remained until he joined Mr. William Hudson, who had an extensive practice in the City. Later Mr. Booth became a partner of the firm, with Mr. Hudson, jun., the practice being carried on under the title of Hudson, Son, and Booth, until the death of Mr. William Hudson, after which it was continued by the remaining partners, and subsequently by Mr. Booth alone. Mr. Booth was elected an Associate of the Institute in 1881, and served for many years on its committees. He was also one of the oldest members of the Architectural Association, having joined that body in 1863. In these early days he took an active part in the work and organisation of the Association, acting as Visitor to the classes, etc., while, having a good tenor voice, he joined heartily in the old A.A. Plays and Soirées. In the early days of his practice he carried out a considerable amount of domestic work, and after his partnership with Mr. Hudson he became responsible for most of the architectural side of the firm's work, Mr. Hudson, jun., attending to the surveying and valuing branches of the business. Owing to the

cutting of Queen Victoria Street in 1870, several of Wren's churches were interfered with by the removal of old property abutting upon them, and the firm being at that time surveyors to the parishes of St. Nicholas Cole Abbey, St. Benets, Paul's Wharf, and St. Andrew by the Wardrobe, they were instructed to make the necessary alterations and improvements. The most extensive work was required to the Churches of St. Nicholas and St. Andrew, entirely new fronts to the new street being necessary; and at a later date a new organ gallery was erected at St. Nicholas, while the interiors of St. Benet Paul's Wharf and St. Andrew's were remodelled to a considerable extent to meet modern requirements. These alterations were most carefully carried through by Mr. Booth, the old work being scrupulously preserved and used wherever possible, while the continuity of Wren's design was maintained in the new work. The practice of the firm embraced building works of almost every character, both in the City and suburbs. The following are a few of the more important: Business premises 66 Great Titchfield Street; alterations to Lyceum Theatre; Rochester Buildings, Leadenhall Street; residence for E. F. Hilton, Esq., Balham; 111 High Street, Marylebone; 114 and 115 High Street, Marylebone; factory for the London Liquid Carbonic Acid Gas Company; warehouse and showrooms, Upper Thames Street, for Henry O'Brien, Esq. (first section); Mullen's Hotel, Ironmonger Lane; warehouse and offices for Messrs. Blundel Spence & Co., Upper Thames Street; No. 10 Clifford Street, W.; No. 8 Broadway, Ludgate Hill; addition to Paul's Bonded Warehouses, Upper Thames Street; showrooms and offices, Upper Thames Street, for Henry O'Brien, Esq. (second section); office building, 31 and 32 Crutched Friars; Farrow's Bank, No. 1 Cheapside, E.C.; alterations and additions to 111 and 113 Queen Victoria Street, E.C., offices of the *Financial News*. Just before his death Mr. Booth had taken into partnership his chief assistant, Mr. G. Morris Viner, Licentiate R.I.B.A., and the practice will be continued by him at 113 Queen Victoria Street.

Mr. James Crofts Powell, who died on the 17th August, was a member of the firm which has been known for some generations as James Powell & Sons, of the Whitefriars Glassworks. His share in the management of the business was the artistic department, and especially the stained glass. He was responsible for the carrying out of the very fine windows at Liverpool Cathedral, which, as *The Times* obituary notice says, have struck rather a new note and shown that glass-painting may dispense with mock-medievalism; that it may be modern in treatment and yet keep touch with native English Gothic. The firm carried out the mosaic decoration at St. Paul's from the designs of Sir Wm. Richmond, and the materials and methods of working employed were described by Mr. Powell in a Paper on Mosaic read before the Institute in February 1894 [JOURNAL, 15th February 1894].

CORRESPONDENCE.

Professor Haverfield's "Ancient Town Planning."

To the Editor, JOURNAL R.I.B.A.,—

SIR,—I find that some words I used in the Review in the July issue of the JOURNAL of Professor Haverfield's "Ancient Town Planning" have given the impression that I wished to controvert the author's rejection of the late Mr. Bellows's theory about an exact Roman survival in the four main streets of Gloucester. That was not at all my intention, and I only meant to express regret that Professor Haverfield had not added a sentence or two in his book to show where Mr. Bellows went wrong. The case of Gloucester is an interesting one and well worthy of study.—I am, etc.,

G. BALDWIN BROWN [Hon. A.].

Sunlight and the Colours of Stained Glass.

12 Buckingham Street, W.C.: 31st July 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Mr. Noel Heaton's letter in your issue for July attributed any loss of colour in light passing through old stained glass and reflected from interior stonework to diffusion and attenuation by a "film or patina of corrosion" or by dirt; and he states that the phenomenon can only be observed when one is deceived by the contrast with the more powerful light through patches of new glass.

My informant did not mention any such patching in the case he observed, and I anticipated that the chief cause was that which Mr. Heaton observed in an aggravated and obvious form at La Ste. Chapelle—viz., absorption by the interior stonework.

It should be possible to readily test the effect of the reflecting surface by placing a handkerchief or piece of white paper on the sunlit patch.

Yours faithfully,

PERCY J. WALDRAM, *Licentiate*

The Allied Societies.

The Guildhall, 28th July 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—I was much surprised to see in the JOURNAL of the 25th inst. a report of a speech by Mr. Adam F. Watson including the following words:—

"With reference to the particular societies mentioned by Mr. Perks, namely the Edinburgh Association and the Hampshire Society, Mr. Perks spoke about their being composed 'mainly of people who had merely an interest in architecture,' but," etc.

Of course I never made that ridiculous statement.—Yours obediently, SYDNEY PERKS [F.].

The Allied Societies and the Institute Funds.

14 Parade Chambers, Sheffield:

11th August 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—What audacity to suggest that the Allied Societies contribute to the funds of the Institute! May I tender my congratulations to Mr. Perks on

his vigilance in this matter, and, clever controversialist that he is, upon the manner in which he has seized and adapted to his own point of view the half-truth of which he complains?

"The whole of the Allied Societies put together do not contribute one penny; on the contrary, they are a heavy expense to the R.I.B.A. . . . For the year 1913 they cost us £619 15s." So writes Mr. Perks in the *JOURNAL* of 25th July last. We all know that the Allied Societies, as such, do not contribute to the funds of the Institute; it is fortunate for their yearly balance sheets that this is the case. Surely Mr. Perks is aware that the sum of £538 2s. 6d., the amount contributed last year to the Allied Societies, represents a sum just four times greater paid as subscriptions by Fellows and Associates of the Institute who are also members of Allied Societies. Unfortunately, all provincial Fellows and Associates are not members of Allied Societies, or the amount contributed would have been greater, and it may be that the heart of Mr. Perks would have been proportionately more deeply grieved.

The subscriptions of Fellows and Associates who are also members of Allied Societies amount to nearly one-third of the total sum received from these classes of members. These particular Fellows and Associates form a not insignificant part of those comprised in the "us" mentioned by Mr. Perks. They desire and have received consideration from the Council of the Institute, and no doubt will continue to do so in the future.

The great majority of the Licentiates are, I believe, provincial architects; many of them are members of Allied Societies. It was, in fact, due to the influence of the latter that so many architects joined the class of Licentiates. Indirectly, therefore, the subscriptions received from members of this class are largely due to the Allied Societies, and this fact should be placed to their credit in any estimate of the cost they entail upon the funds of the Institute.

Such quibbles as this—whether the Allied Societies do or do not contribute to the funds of the Institute—will not deceive any who know the facts of the case. But the unwary may be led astray, and for this reason I have tried to put the case of the Allied Societies in reply to Mr. Perks' somewhat specious arguments.

Yours obediently,

JAMES R. WIGFULL [A.]

COMPETITIONS.

New School, Sunderland Road, Gateshead.

Members and Licentiates of the Royal Institute of British Architects must not take part in the above competition, as the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

By Order of the Council,

IAN MACALISTER, *Secretary*.

Shakespeare Memorial National Theatre.

The following conditions must be observed by architects proposing to submit designs in accordance with the advertisement appearing in *The Times* of July 21st, 1914, and printed in the *JOURNAL* for 25th July, p. 612.

The names of the architects sending in designs, and also their designs, will be seen only by the Assessor and the Sub-Committee.

The drawings may be the original working drawings of buildings erected, or they may be elevations of buildings designed but not erected.

Not more than five drawings or photographs should be submitted, and not more than two perspectives.

A short report of the designs may be submitted, and also a list of buildings of importance designed or erected.

All drawings to be sent in a portfolio on or before the 15th day of September 1914, to The Secretary, the Shakespeare Memorial Committee, 3a, Dean's Yard, Westminster Abbey, S.W.

The Trustees are the Earl of Plymouth, the Earl of Lytton, and Sir Carl Meyer, Bart.

Dublin Town Planning.

In consequence of the various difficulties arising from the present situation, the Lord Lieutenant of Ireland has decided to postpone the time for sending in plans, etc., for the Dublin Town Planning Competition until April 1915.

THE EXAMINATIONS.

The Final: Designs approved.

The Board of Architectural Education announce that the designs submitted by the following students who are qualifying for the Final Examination have been approved:—

SUBJECT XV.

(a) DESIGN FOR A MUSEUM (DETACHED) IN THE PARK OF A COUNTRY TOWN.

Adams: P. J.	Evans: T. C.	Leadam: G. S.
Alison: W.	Fernyhough: S.	Lister: H. A.
Allison: W.	Forbes: A. S.	Loweth: S. H.
Armstrong: J. R.	Ford: L. S.	Maddock: R. H.
Batty: W. A.	Fraser: R.	Moore: R. S.
Brooks: G. J.	Gooder: F. E.	Moscrop: W. N. J.
Brown: J. M.	Gossling: H. F.	Moss: D. J.
Burford: J.	Graham: R. D.	Nathaniel: J. J.
Butt: P.	Hague: H. V.	Pace: C. L.
Carey: J.	Hamilton: A. B.	Palmer: J.
Carreras: L. E.	Herford: T.	Robertson: G. A. K.
Chick: C. C.	Holt: G. H. G.	Ryan: H. A.
Ching: W. L.	Hossack: J.	St. Leger: C. D.
Clare: A. D.	Howcroft: G. B.	Sanders: T. A.
Cosser: G. A.	Jacob: J. H.	Shenstone: G.
Cullen: A.	Jones: L. F.	Spence: A. T.
Currie: J. K.	Jones: W. O.	Takekoshi: K.
Davison: W. R.	Jopling: A. B. B.	Taylor: J. A. C.
Donaldson: B.	Kassem: H. Z.	Walch: J. B. M.
Dowsett: T. W.	Koch: M. D. N.	Whitehead: P.
Duncan: R. A.	Lancaster: C.	Wilkinson: F.

(b) DESIGN FOR AN OPEN TIMBER ROOF TO A SCHOOL HALL.

Adams: W. A. C.	Grellier: C.	Robertson: M.
Armstrong: J. R.	Lavender: E. C.	Smith: A.
Aslin: C. H.	Lawton: W. V.	Toothill: J. C. P.
Booker: G. A.	MacMillan: A. L.	Vinden: G.
Cawkwell: R.	Moore: J.	Walker: D. H.
Craske: C. W.	Picton: C. S.	Walker: H. F.
Eyle: J. S.	Pidsley: W. G.	Wright: C. H.
Gray: G. H.		

Designs for other subjects from the following candidates have also been approved:—

Burford: J.	Hamilton: A. B.
Carmichael: D. A.	Mortimer: A. L.

LEGAL.

Application of the London Building Act 1894 to the London County Council's Elementary Schools.

DAUBNEY (DISTRICT SURVEYOR) v. ARKERS & CO., LTD.

This case was heard before Mr. A. E. Gill at the Tower Bridge Police Court on 31st July 1914.

The District Surveyor, Mr. Chas. A. Daubney, summoned the contractors for not having given him the usual notice. He had been in communication with them and the London County Council from January to June 1914 urging them to give notice, but without result. The London County Council defended the case on behalf of the contractors, whom they had instructed not to give notice.

Mr. Gill delivered his decision as follows:—

The defendants are contractors carrying out certain building work for the London County Council as the Education Authority for London at their school in Southwark Park Road. It is admitted that no notice of such work has been served upon complainant, who is the surveyor for the district in which the school is situate.

It has been proved or admitted that the work is being done upon building "according to plans which are, under regulations relating to the payment of grants, required to be, and have been, approved by the Board of Education" within the meaning of section 3 of the Education (Administrative Provisions) Act, 1911. Under that Act "any provisions in any local Act dealing with the construction of new buildings" do not apply "in the case of any new buildings" so approved. If therefore the buildings in this case are "new buildings" the defendants are under that Act exempt from serving a building notice.

The work in question is of a twofold character. It consists of (1) certain alterations, which I do not think it necessary to describe in detail, made to an old building—namely, the infants' department. As altered it appears in the plan A put in by the defendants, described as the Infants' Department Remodelled. (2) The addition of a new wing, described in the plan as the Infants' Department Extension. This projects from the north-western corner of the old building almost at right angles to its western side.

The extension consists of a corridor with class-rooms opening off, and is connected with the original building by an opening cut in the external wall of the latter so as to form a continuous passage. At the end of the passage remote from the old building is an entrance from the playground.

It has not been contended that the whole building as altered and extended constitutes a "new building." It is admitted that the "Remodelled Infants' Department" is not a "new building." But it is contended that the extension is a "new building" within the meaning of section 3 of the Education (Administrative Provisions) Act, 1911.

The term "new building" in this section must, I think, be either construed in its natural sense or explained by reference to the London Building Acts. By the London Building Act, 1894, section 5 (6), the term "new building" is defined "to

mean and include," *inter alia*, "any space between walls and buildings which is roofed or commenced to be roofed after the commencement of this Act." It has been contended that this definition covers the case of the new wing. I do not think that those words can apply to an addition. Otherwise it is difficult to understand how any addition can escape being included in the category of new buildings.

But the London Building Act, 1894, clearly distinguishes between "new buildings" and "additions" to old ones. They are so distinguished in the Third Schedule. The district surveyor's fees are different in the case of New Buildings and in that of "additions." Additions are placed on the same footing as alterations. Similarly in section 209, which subjects "additions," "alterations" and other work done upon a building to the provisions of the Act relating to new buildings, it is assumed that an "addition" is distinct from a new building.

Whether a building is a new building or an addition to an old one must be a question of fact and degree. In the case of *Holliday & Greenwood, Ltd., v. District Surveyors' Association and Dicksee* the Court appear to have so treated it. In my opinion whether the expression "new building" in the Education (Administrative Provisions) Act, 1911, section 3, is construed in its natural sense or by reference to the London Building Act, the extension of the infants' department is not a new building but an addition to an old one; and the defendants were therefore not exempt under that Act from serving a building notice in respect to it. However this may be, it is admitted that the defendants were not exempt under that Act from serving a building notice in respect to the alterations to the old building.

It is, however, contended that apart from the Act of 1911 the defendants were not liable to serve a building notice on the following grounds. It is contended: (1) That by section 201 (5) of the London Building Act, 1894, the building in question is exempt from the operation of Parts VI and VII of the Act as being a "public building" "belonging to" or "occupied for public purposes by the County Council of London," as by section 5 (27) "public building" means "a building used or constructed or adapted to be used as a . . . school"; and (2) that although section 145, which provides for the service of a building notice, is not included in Parts VI or VII, the defendants were not liable to serve a notice because in the particular facts of this case the district surveyor had no duties to perform.

It is pointed out that the exemption from Parts VI and VII relieves the district surveyor of all duties in respect to materials and construction. As to the other parts of the Act, it is urged that the buildings are remote from the street. No question of building line in fact arises. The elevation of the roof of the old building has not been raised. The addition has no story above the ground floor. No question of height therefore arises. The case of *Westminster Corporation v. Watson* (1902 K.B. 717) is relied upon.

As to the first point I am of opinion, but with some hesitation, that the exemption under section 201 (5) applies. The second point appears to me to have been decided against the defendants by the joint effect of the cases *London County Council v. District Surveyors' Association and Willis* (73 J.P. 291) and *Gallbraith Brothers v. Dicksee* (74 J.P. 348). In the latter, Alverstone, C.J., observes: "Mr. Lush has said that in this particular case he (i.e. the district surveyor) would have nothing to do. That may be perfectly true; but it does not follow that because he has nothing to do in a particular case he will have nothing to do in any case." And further on: "The surveyor has to keep the eye of a watch dog on what is going on."

It is to enable the district surveyor to exercise this supervision that notice must be served, and it is not an answer that in a particular case such as the present he may have nothing to do but to ascertain the fact that no breach of the Building Act is involved in the work.

The learned magistrate inflicted a nominal penalty of £1, with £15s. costs.



Fig. 1. CRETE.

MINOAN ARCHITECTURE: A STUDY OF PRE-HELLENIC ART IN CRETE.

By ALEXANDER R. C. EATON.

Essay submitted under the motto "Daedalus," awarded a Certificate of Honourable Mention in the Competition for the R.I.B.A. Essay Medal 1914.

I.—INTRODUCTORY.

"**H**ISTORY is poetry, could we tell it aright," said Carlyle, and of no history is this truer than of that of Crete. It is poetical alike in its picturesque setting, its rise, course, and final overthrow; the persistence of its fragmentary records in the literature of Greece, discredited and even utterly disbelieved for hundreds of years by men of learning; and its almost dramatic revelation to the modern world by the discovery of its remains.

Even to classical students twenty, nay, ten years ago, Crete was scarcely more than a land of legendary history and rationalised myths. It is true that the first reported aeronautical display was made by a youth of Cretan parentage, but in the absence of authenticated records of the time and circumstances of his flight, scholars were sceptical of his performance. And yet within less than ten short years we are faced by a revelation hardly more credible than this story; we are asked by archaeologists to carry ourselves back from A.D. 1910 to 1910 B.C. and witness a highly artistic people with palaces and treasures and letters, of whose existence we had not dreamed.*

It is the history of this rich and highly developed civilisation of which it has been endeavoured to treat in this essay; more particularly on its architectural side. A wide interpretation has, however, been put upon the term "architecture"; an interpretation wide enough to make it embrace not only architecture in the sense of building, but the allied arts of fresco painting, sculpture, pottery, etc., while the geography, history, religion, and social life have also been touched upon.

This breadth of outlook has been adopted deliberately for four reasons. First, because all decorative art, whether it be concerned with the painting of frescoes or the carving of bas-reliefs, the shaping and decoration of vases or plaques, the design of furniture or hangings, falls within the architect's legitimate sphere. Its effect upon his building either for good or ill may be most decided. It may enhance and carry on the effects produced by the structure itself; or it may mar or even destroy altogether the unity of the design.

Secondly, because of the debt we owe to these allied arts for our knowledge of important architectural facts. Especially in dealing with the architecture of very early civilisations, it is frequently the case that the architectural remains throw no light on some very important points, as, for example, the style of elevation; and these points can often be solved, in part at least, by reference to existing pottery or frescoes, as the elevation of Minoan houses, on enamelled plaques found in the Palace at Knossos, which are dealt with elsewhere in this essay.

* Hawes' *Crete, the Forerunner of Greece*: Introduction.

Thirdly, because of the influence all these allied subjects have on architecture. Under present-day conditions it is perhaps a little difficult to see how the engraving of a gem, the carving or moulding of a vase or the painting of a fresco can have much influence on the oldest and the grandest of the arts; but when one has divested oneself of the present as much as possible and looked at the question from the point of view of the past, the subject is seen to have a different aspect. The specialisation which is so prominent on all sides to-day was unknown in the past, when one man often combined in himself the most diverse accomplishments, so that the man who led a successful campaign to-day might to-morrow be writing histories or reforming the calendar, and the architect might be also painter, engineer, poet and philosopher. If then the architect of the palace at Phaestos or the Villa at Haghia Triadha may have been actively engaged in the allied arts, the study of them is almost sure to throw interesting cross-lights on the architectural work of the period, for a man's training in the practical technique of art must inevitably show itself in his designs.

As a final reason, and perhaps the most important of all. It is impossible to form a just estimate of past ages if the view is so narrowed as to take in only one aspect of that past. The relationship of event to event, the working of cause and effect, are not clearly comprehended or properly understood, and there must be a resulting loss in the grasp of the subject under study. Even viewing a period as comprehensively and sympathetically as we can, we have it on the authority of a great historian* that "to be entirely just in our estimates of other ages is not difficult, it is impossible," but it is certain that the more comprehensive our view, the more just will be our final estimate of the period under study. The constant endeavour then of the conscientious student of an earlier age, from whatever point of view he approaches it, must always be to comprehend it as a whole, that he may see the different parts in their relative positions and correct perspective, though selecting always, of course, a point of view from which the particular objects in whose examination he is engaged, shall appear in the foreground of the picture.

The author, before proceeding to the detailed consideration of his subject, would take this opportunity of expressing his indebtedness to Sir Arthur Evans, D.Litt., LL.D., F.R.S., F.S.A., etc., to whom all students of Cretan antiquities owe so much, for his kindness in replying to questions addressed to him; indeed, both for text and illustrations the author is indebted to him, directly or indirectly, on almost every page. Also to Professor W. G. de Burgh, M.A.; G. Macmillan, Esq., D.Litt., Chairman of the British School at Athens; J. ff. Baker-Penoyre, Esq., Secretary of the Hellenic Society, and to the Librarian of the Institute and his staff.

II.—THE WORK OF EXCAVATION IN THE AEGEAN AREA.

(a) CAUSES LEADING TO EXCAVATION.

Greece, at its first appearance in history, is a highly civilised country with laws and institutions, social and political life, developed literature and art. Of its past little or nothing was until recently known. Few even dared to hazard a guess as to origins or progress prior to the historic period. Before about 700 B.C. all was more or less uncertain, fading gradually from the full light of history through the twilight of semi-historical tradition into the darkness of pure myth and legend. The tomb of Agamemnon and a few other remains of uncertain date, were known, it is true, but beyond a vague assignment to the Pelasgi, little in the way of theories were hazarded in regard to these. They were regarded in somewhat the same way as the Egyptian hieroglyphics before the discovery of the Rosetta stone, as past explanation. The stories of the siege of Troy, of Helen and Hector, Priam and Paris, Achilles, Agamemnon and Atreus, of the wanderings of Ulysses, and the countless other stories which professed to tell the early history of the Hellenic peoples, were regarded as having practically no real basis of fact. They were stories with probably some slight admixture of truth, but still merely stories.

* Froude, *Short Studies*, vol. i.

believed in perhaps by the too credulous Greeks, but not capable of deceiving modern intelligence. For the modern "it was impossible to decide how much in the ancient epos was truth and how much poetic fiction,"* and being in doubt, he chose to believe nothing. So, too, the stories connected with Crete, Minos and his terrible Minotaur, which had its residence in the labyrinth at Minos' capital, the tribute of seven youths and seven maidens which Athens, under the domination of Minos, was compelled to send annually† to the island conqueror for the prey of the monster; Theseus going voluntarily to Crete, winning the favour of Ariadne, the daughter of Minos, meeting and slaying the Minotaur and carrying Ariadne off with him; the mechanical skill of Daedalus in his invention of sails, the wedge, axe and level, and the construction of the famous Labyrinth; and countless other stories were brushed on one side and labelled as of no historical importance, by an age which found it hard to believe in anything at all which could not actually be seen and handled.

In addition to all this persistent tradition there was the fact that the earliest Greek art known was of a highly developed type and must therefore have gone through a long process of development before reaching such a state; for progress in national art and culture, especially in the early stages, is always an exceedingly slow process.‡ A long previous development may, under special circumstances and granted conditions in every way favourable, be followed by a quick flowering and fruition, but never in the whole history of art have the early stages been other than slow and long continued. There was necessary, then, in order to explain undoubted facts in Greek history, a prehistoric period of great length and increasing culture, which must have left its traces somewhere, if only they could be found.

It is no cause for wonder then, that these two broad facts, the persistence of legend and the undoubted existence of a long prehistoric period, should cause some, of greater thinking powers than common, to turn their minds to the subject of pre-Hellenic culture, though even the most sanguine never imagined the variety and extent of the finds that were awaiting them. Within the space of a few decades was to be found material which would not only allow the broad outlines of their history to be settled, but the details of their art, their religion, their sports and their social life to be known, and would enable such a reconstruction of the past that an inspired speaker of these early times might with perfect truth, though in another sense, have used the words which Shakespeare has put into the mouth of Cassius:

How many ages hence
Shall this our lofty scene be acted o'er
In states unborn and accents yet unknown.§

(b) EXO-CRETAN EXCAVATION.

It was in 1829 in the parsonage house of Ankershazen, a small village of Mecklenburgh-Schwerin, that there took place an event of little seeming moment, but which was ultimately to prove of far-reaching importance to all who are in any way interested in architecture, history or racial development. The event was the gift to Heinrich Schliemann, then a boy of seven, of a child's history of the world containing a picture of Troy in flames. This picture awoke a passionate desire to see the scenes of these Trojan wars, which grew as time went on, and no amount of positive assertion could convince him that nothing remained of the great Troy of the Homeric poems. Everything combined to foster his love for mythology and the romantic. His father, a keen classical student, often told him tales from the *Iliad* and *Odyssey*, which must have made a great impression on the mind of the imaginative boy. His surroundings, too, seem to have been most picturesque, and they were redeemed from the ordinary by the prehistoric mound in the village, round which, with other local spots, local tradition had woven many legends of robbers and maidens and men-at-arms whose ghosts were reported to walk, and whose treasure was buried close by. Family misfortunes compelled him to leave home at an early age, and after a short schooling young Heinrich became, at the age of fourteen, a grocer's boy in a little village

* Schuchardt's *Schliemann's Excavations*, ch. i.

† Baldwin Brown, *The Fine Arts*, ch. i. and ii.

‡ Some versions of the story make it every ninth year.

§ *Julius Caesar*, III. i.

|| Schuchardt, ch. i.

store, where he was employed for five and a half years, during which time he developed a passion for Greek through hearing a drunken man, who had known better days, reciting Homer.

The story of Schliemann's subsequent doings reads more like a novel than sober biography. Life as a ship's boy; shipwreck; his life as an office boy with his rigorous self-denial in order that he could pay for education; his rise in the commercial world; and, finally, his amassing a fortune; but through all his work always the same idea, that of ultimately excavating for the site of the Homeric Troy; these elements would surely furnish any novelist with abundant materials for more than one book.

In 1863 Schliemann wound up his business and was free to start on the work on which he had for so long set his heart. He travelled for some years, intending at the end of his travels to commence excavations. A law case and other matters however detained him, and it was not until 1871 that he commenced to dig.

The site chosen to commence operations was Hissarlik, which tradition had always associated with ancient Troy. He brushed on one side as of no account the fact that "every influential scholar and traveller . . . favoured the view that disregards the leading traits of the Homeric picture and bids us recognise the ancient capital of the Troad in a small mountain fastness near Bunabashi, situated at a considerable distance from the sea." * He preferred to follow myth rather than modern and revolutionary ideas.

Some few finds of the Mycenaean period had been given to the world in the few years preceding this start at Hissarlik.† In 1866 workmen getting out pozzolana in the island of Therasia for the Suez Canal works, came across a few primitive structures. Two years later M. A. Biliotti found in the tombs at Ialysus in Rhodes, a number of very fine painted vases, which were afterwards called third and fourth Mycenaean, while the island of Santorin (Thera) yielded to the French School at Athens some pottery of Aegean date.

It was reserved for Schliemann to make the discoveries which were to add a new chapter to archaeological history. With a courage and resolution born of an absolute faith in the truth of his beliefs, Schliemann cut boldly through the upper strata of civilisation, Roman, Greek, &c., and in 1873 reached the second or Burnt City with its fortifications and wonderful treasure of gold and silver objects. This second city was mistaken by Schliemann for the Homeric Troy, a natural mistake when one remembers that it was the first prehistoric city which he discovered, as, the city having grown as years went on, the circuit of the later cities lay completely outside the area of his excavations.

From Troy he passed successively to Mycenae and Tiryns, revealing a rich culture at every place he touched. His discoveries formed a triumphant vindication of his faith in the old Homeric Legends. Schuchardt ‡ has put this very aptly in speaking of the controversy which raged around the question of Troy:—

The question is now decided for ever. On the Hill of Hissarlik Dr. Schliemann has uncovered the ancient palace of Troy, has laid bare its colossal fortifications and brought to light its treasures of gold and silver. Moreover, in the country round about, his unwearying exertions have proved the accuracy of many details which show a coincidence, astonishing even to the most credulous, between the picture unfolded in Homer and the one preserved to this day.

In 1886 Chevalier Tsountas laid bare the foundations of a palace at Tiryns,§ while to the same year belong the finding of Mycenaean sepulchres outside the Argolid, in Thessaly, Kampos, and, richest of all, at Vaphio in Laconia, from whence came the famous golden goblets which have been described as "the most precious of all the works of Mycenaean art that have yet been drawn from the earth." || Pottery of Aegean style had been found just previous to this at Sidon and in Philistia, while in the following years came news of finds of pottery in Egypt, both at Fayum and at Tel-el-Amarna, the latter yielding some two thousand pieces.¶

It was not only the mainlands of the Eastern Mediterranean that yielded evidences of this early

* Schuchardt, ch. i.

† D. G. Hogarth, "Aegean Civilization," in *Encyclopædia Britannica* (1911 ed.).

‡ Schuchardt, ch. ii.

§ Hogarth, "Aegean Civilization."

|| Bury's *History of Greece*, ch. i.

¶ Petrie's *Methods and Aims in Archaeology*, ch. xii.

civilisation. The islands gave similar and hardly less satisfactory results. Antiparos, Amorgos, Ios, Siphnos and Syros, Melos and Cyprus were all tried during this period and yielded good results, while Sicily and, further west, Spain were both shown to have their prehistoric remains of Aegean art and culture. There remained to the historian and archaeologist a great task, that of marshalling and arranging this great mass of finds, correlating one with another, and finally producing some clear and connected account of the great pre-Greek civilisation that had evidently had its home in the Aegean.

(c) EXCAVATIONS IN CRETE.

Before any decision could be arrived at with regard to the history of Aegean culture, there was one point awaiting solution—namely, where did this early civilisation centre? What country or city was its fountain head, the metropolis of its artistic and political achievements? The claim of any spot to be this centre had to be submitted to two tests. It had first of all to show traces of all periods of which remains had been discovered; and it had, secondly, to show a sufficiently large output of the pre-Hellenic art at its best.* Practically every available place, save one, had been tried, and had failed to fulfil these two conditions. Either there was lack of evidence of continuous occupation, or the variety and amount of art work produced was not such as would give it any pre-eminence over similar sites in many other spots.

The place which was awaiting exploration was Crete, the largest of the islands of the Eastern Mediterranean and one which in many ways offered itself as the most eligible spot at which this civilisation could have taken its rise. There was a great mass of early legend pointing to Crete as the heart of a prehistoric culture; its position and natural conditions were favourable, and many isolated finds had been made here.†

Why then had Crete not been taken seriously in hand? A glance at the pages dealing with Cretan history will show. Ruled by an alien and a corrupt power, and inhabited by a race who passionately detested their over-lords, the island was the scene of constant unrest, and even bloodshed. Insurrection followed insurrection, as regularly as they do at the present time in some South American States, and the conditions arising from this state of affairs were naturally such as to render abortive any attempt to commence archaeological research. Archaeologists had to be content to wait.

It was in 1898 that Turkish rule—or misrule—practically came to an end in the island and Europe took over the management of things. The way was now cleared for serious work in the island, and the archaeologists were not slow to avail themselves of the more favourable conditions. In 1900 Dr. (now Sir John) Evans commenced work at Knossos, while Professor Halbherr excavated in Phaestos and Aghia Triadha, Miss Boyd (now Mrs. Hawes) at Gounia, Mr. Hogarth at Psychro and Zalero, Messrs. Bosanquet and Dawkins at Palaikastro, and Mr. Seager at Vasiliki, Psyra, and Mikhlos. No doubt could now be entertained, from the number and variety of the finds, that the original home and centre of pre-Hellenic art had been found, and though the claims of various places to be the parent and tutor of Minoan culture have from time to time been put forward, yet every fresh discovery seems to tend to establish more securely the claim of Crete to pre-eminence.

III. THE SETTING.

(a) GEOGRAPHICAL.

The civilisation of Crete (map, Fig. 1) may be said to be, to some extent at least, the gift of its geographical situation. In this situation it is, or perhaps it would be more correct to say was, singularly fortunate. Before Oceanic superseded Mediterranean civilisations, the great lake was the region round which centred all that counted in the affairs of the known world, and Crete was at the centre of the Eastern Mediterranean, and moreover within easy reach of the mainland, both European

* Hawes' *Crete*: Introduction.

† Hawes' *Crete*: Introduction; Hogarth's "Aegean Civilization" and Evans' "Crete" in *Encyclopædia Britannica*.

and Asiatic, being only 110 miles from Asia Minor and 60 miles from Greece. In addition there were many small islands, forming as it were stepping-stones to the shore. The African coast was barely 200 miles away, while Crete could be reached from Egypt, at the time of the rise of the Aegean culture the most highly civilised country in the world, in under 400 miles, and had also the advantage of lying in the direct route from that country to Europe, so that any commerce Egypt might want to carry on with Europe could hardly help touching Crete—and that commerce was regularly carried on is proved by the finds. Even to-day Zakro is still the principal half-way house for sailing craft between the Aegean area and the north coast of Africa.*

The island nature of their home would make the Cretans from their earliest days a nation of sailors, and this combined with their position would practically force them to become traders, and trade and civilisation almost invariably go hand in hand.† Their maritime life would afford an excellent training in some of those virtues which are most essential in building up a civilisation: courage and hardihood, quickness of hand and eye; the habit of constant observation—for the Eastern Mediterranean is not a sea where navigation can be played at: numberless small islands, hidden reefs and sudden and furious storms, combine to render seamanship in those waters, if not a dangerous calling, at least one allowing no slackness; while if only in providing motifs for design, the sea has had some direct influence on Minoan art.

Crete is the third largest island in the Mediterranean, having an area of some 3,330 square miles, a length of 160 and a breadth varying from $7\frac{1}{2}$ to 35 miles. Its coast line on the north is much indented, forming several natural harbours, the finest being that of Suda. The south coast has no secure harbour, but there is anchorage in several bays during summer weather or at all times when there is a north wind.

The mountains fall into four principal groups, which are joined up by lesser connecting ridges. There are several very fertile plains: whilst a peculiar feature of the island and one which has contributed to the prosperity of its inhabitants is the existence of level upland basins, among the mountains, where pasturage can always be found in summer. The island abounds in deep and narrow chasms and large caves, the most famous, of course, being that of Dictæ.

The trees include the cypress, olive, orange and lemon, chestnut, and valonica oak. The lower hills and valleys are extremely fertile.

(b) CLIMATIC.

The climate of Crete may be said to be midway between that of Europe and Africa: less rigorous in winter than, for instance, that of Greece, but not so hot in summer as that of Africa. The total rainfall of the island is not excessive—though it was probably greater at the time which is being discussed owing to its being much better wooded then than now—but in the wet season the rain is of a tropical nature: sudden and violent storms and torrential rains being the normal order of things. This question of climate, as will be seen later, profoundly influenced Minoan planning.

(c) GEOLOGICAL.

The geological structure of the island is exceedingly complex, and no attempt will be made here to give a scientific description of it. There is a bed of metamorphic rocks nine to ten thousand feet thick, consisting of gypsum, dolomite, conglomerates, phyllites, and a basic series of eruptive rocks, gabbros, peridotites, and serpentines; also later beds of the Jurassic, Cretaceous, and Tertiary periods, yielding limestones, schists, &c. It will thus be seen that there was abundance and variety of stone available both for structural and decorative purposes, and in addition clay for the making of bricks, &c., was ready to hand. These materials, together with the timber obtainable from the trees previously mentioned and the metals obtainable from the earth, furnished practically every kind of

* *British School at Athens: Annual*, VII. p. 123.

† Professor de Burgh, *Legacy of Greece and Rome*, ch. i.

building material that could be desired, and gave the people ample opportunity of showing their skill as designers and constructors in various materials. Geologically Crete was as fortunate as geographically, and favourable conditions in the hands of a suitable people produced, as might have been expected, great results.

IV. THE PEOPLE.

(a) ORIGINS.

From whence came the people who built up the great civilisation of Crete? This is a question to which it is very difficult to give a really satisfactory answer, and from the tangle of facts which are quoted in support of widely differing theories but a few can be stated here, and many points admitting of a good deal of argument will have to be summarily stated.

Anthropometry has done much to help in deciphering this question of origins, for the types of skull remain the same for thousands of years * and thus form a reliable guide in tracing racial movements in the past.† The comparison of the cephalic index of some hundred skulls of the Minoan period has shown that the great majority, some 65 or 70 per cent., were dolichocephalic or long headed, the greater part of the rest being of a medium type. This difference of skull type, which exists, it is interesting to note, to this day in Crete, proves almost conclusively admixture of races. The long-headed race, which formed the bulk of the people, came without doubt originally from Africa. One of the strongest proofs of this is the persistence of the loin cloth throughout the whole of the Minoan era. Now this is distinctively the garment of the South, and was eminently suited to the southern climate, but if one accepts the conclusions of, among others, Schmidt,‡ that migration into the Ægean area came from the North, the fact has to be faced that the distinctive dress of the North is not the loin cloth but the shirt;§ the former would be eminently unsuitable for the climate, and, accepting the "northern" theory, the people must for some unknown reason have dropped their own garment and adopted one they had probably never seen before. The squatting attitude so noticeable in some Minoan figures is also strikingly characteristic of the South. Again, the colonisation of Crete probably took place at a time just after the last ice age, when the northern portions of Europe were absolutely uninhabitable and so could hardly have colonised the South.

The diffusion of this primitive long-headed people was undoubtedly very wide, extending over practically the whole Mediterranean area. The evidences for this are very strong. We have a certain unity of language of a pre-Hellenic, non-Aryan, and non-Semitic type—according to Fick || a real affinity between Pelasgian Greece, Minoan Crete, and Carian Anatolia is highly probable. We have a unity of cranial form; and we have a unity of artistic motifs: even Egypt shows evidences of this common origin.*

The origin of the brachycephalic element in the Cretan people is much more obscure and admits of no dogmatic statement. It is very probable—and this view is supported by the Eastern influences discernable—that these broad-headed people came originally from Asia Minor. The whole subject of origins is, however, still very much a matter of controversy, and one cannot be sure of much beyond the broadest facts.

(b) HISTORY.

Even perhaps more than their origin is the history of the Cretans a thing of uncertainty and conjecture. It begins in legend and myths and only gradually emerges into history proper, so that there is often difficulty in picking out what is pure legend from what is substantially true though told

* Professors Myers and Collignon.

† This theory, it is only fair to state, has been seriously challenged (Petrie, *Journ. Anth. Inst.* XXXVI., also in *Migrations*); it has even been suggested (Professor Arthur Thomson in *Journ. Anth. Inst.*) that the cephalic index can be altered in a lifetime by change of food.

‡ *Zeitschr. für Ethnol.*, 1904.

§ See representation of northerners on Warrior Vase, etc., Furtwängler and Loeschkes' *Mykenische Vasen*.

|| *Vergriechische Ortsnamen*.

* *Journal of Hellenic Studies*, XXIII. 162.

under the form of myth. It must always be borne in mind that the greater number of these myths are not native to Crete, but were formulated in later ages and foisted on the island by the Achæans, after the fall of Cretan supremacy; that, for instance, Zeus was utterly unknown to the Minoans themselves. Zeus, it will be remembered, assumed the form of a bull the better to press his suit with Europa, and in this form carried her off to Crete, where he assumed again his normal form and declared his love. From their amours sprang Minos, who became king of Crete—

From nine years old ruled Minos, who great Zeus for a speech-friend won,*
was just and moderate, gave laws to his people, and was after death made absolute judge in the infernal regions. He was succeeded by Minos his son, who extended the power of Crete over the neighbouring islands, and conquered Athens. Of him we have the stories of the Minotaur, Daedalus, &c. It seems probable, as we find it applied to several kings, that this name of Minos was a dynastic title rather than a personal name.

Little as we know of the early times we can at least be certain of several points. The traditions † of extensive domination and of the clearing the sea of pirates are undoubtedly true: the former is proved conclusively both by the large number of tribute tallies which have been discovered and by the survival of the place-name Minoa ‡ over the whole Ægean area: it being found in, amongst other places, Siphnos, Palestine, Arabia, Sicily, and Laconia.

The historic tradition which identifies with the Cretans the principal element of the Philistine confederation,§ and places the tomb of Minos himself in Western Sicily, thus receives remarkable confirmation.¶

The empire of Crete began, according to the belief of Dr. Mackenzie, as an Ægean league ¶ and gradually developed into an empire, much the same as Athens did later.

Minoan periods are three: Early, Middle, and Late, each being in turn subdivided into three parts.

The Early Minoan period may be said to take its rise about 2800 B.C., lasting until 2200; the Middle Minoan from then until 1700 B.C.; the Late until 1200 B.C., when the Iron Age takes the place of the early Bronze Age, and Cretan history is lost until the island emerges from obscurity in Hellenic times.

In the Middle Minoan period (2000 B.C.) Crete reached its first climax; Knossos and Phaestos came to the front as leaders; trade flourished and the arts were at their height.

The height of prosperity for the smaller towns of the island was reached in the first Late Minoan period, when peace and prosperity were the order of the day and art production was free and good. The second Late Minoan, or Palace, Period, was the so-called "Golden Age" of Crete. It witnessed the completion of the second palace at Phaestos and the remodelling of that at Knossos. At the end of the period the country towns fell, Knossos not falling until the succeeding period; during which period also took place the partial re-occupation of the various sites, followed between 1210 and 1200 B.C. by the final invasion and fall of Crete.

The great catastrophe was not the work of an Aryan people, as has been asserted; nor can we follow Sir Arthur Evans ** in attributing it merely to an internal revolution; the destruction was too widespread and universal for that; it was most probably the work of a kindred Aegean race,†† driven onward from their homes by the pressure of the oncoming Northmen. Directly the ruling dynasties were removed these newcomers seem to have settled down in a fraternal manner with the people, and for a short time there existed a period of re-occupation, which was finally ended by the coming of the Northerners. All over the Aegean the same thing was taking place; the Northerners were coming—here in smaller bodies, there in larger; here peacefully assimilating the culture of the older people, there sacking and destroying; in some places driving those among whom they came to win new homes in their turn by conquest of their kinsmen overseas.‡‡

* *Odyssey*, XIX. 178.

† Herodotus, III. 122; Thucydides, I. iv. and viii., etc.

‡ Burrows' *Discoveries in Crete*, ch. I., also Fick's *Vor-griechische Ortsnamen*.

§ Psalm lxxxiii. 7.

¶ Evans in *Encyclopædia Britannica*: "Crete."

¶ "Phylakopi."

** *Times*, 31st Oct., 1905, and *B.S.A.* XI.

†† Mackenzie, *B.S.A.* XIII.

‡‡ Burrows' *Discoveries*, ch. ix.

The crash was not nearly so great in Crete as it had been at the time of the former catastrophe; indeed it seems to have been rather a gradual dying out of art and culture, the imposition of Dorian customs and conditions—we find, for instance, varying types of burial custom in the same tomb* and continental types of weapons and pottery side by side with the old island types.

The outstanding feature of these Dorian invasions was, of course, the bringing of iron, which had hitherto been unknown in Crete. The very interesting discovery of two swords at Tell Firaun in the Nile delta bearing the cartouche of Seti II. (XIX. dynasty) of precisely similar form to those brought into Crete by the invaders, which appear first in one of the famous Moulianá tombs just subsequent to L.M. III., has enabled the date of the invasions to be fixed with great accuracy.† Since the reign of Seti II. was during the last decade of the thirteenth century B.C., these invasions must be of that date also. It is interesting to know that this period is said to satisfy the conditions required by the Homeric armour.‡

The great defect in Cretan history, as in that of later Greece, was always want of unity and continual internal strife: now one city would obtain mastery, then another, until there came at last the final overthrow, and Crete disappeared into the "dark ages" from which was to spring the Greece of classical times.

(c) RELIGION.

It has already been pointed out that the deities whose names have been more or less associated with Crete in later times were unknown to the Minoans themselves. Their religion was of a much more primitive type, and was one, moreover, that showed development during the course of Minoan activity. It was at first aniconic, later an image cult grew up side by side with the earlier form.

The central feature of the religion consisted in the habitation of natural features, rocks, mountain peaks, etc., or such objects as pillars of wood or stone or axes, by the divine spirit; § and the essential rite or ceremony consisted in the bringing down of the celestial spirit into the fetish objects by proper incantations, &c. || The chief divinity was a great nature goddess, with whom was associated as half consort and half son an inferior male satellite. ¶ Her dominion extended even to the underworld. She is represented sometimes with doves, as goddess of the air, sometimes (in her clothed aspect) with snakes; sometimes she has lions with her or holds the double axe.

There seems to be an interesting harking back to the more primitive efforts after the representation of this divinity in the very interesting finds ** at the House of the Fetish Shrine, Knossos, where were discovered a series of grotesque concretions of quasi-human appearance very similar to some discovered in Egypt††—two of which probably represented this mother goddess and her son-satellite. The actions and influence of this goddess are admirably summed up in those lines of Browning ‡‡—

I shed in Hell o'er my pale people peace;
On Earth, I, caring for the creatures, guard
Each pregnant yellow wolf and fox-bitch sleek,
And every feathered mother's callow brood,
And all that love green haunts and loneliness.

No temples, as far as is known, existed. Fergusson exhibited a quite prophetic instinct when, in speaking of the subject, he said, §§ "Like the Assyrians and other cognate Asiatic races, they were not temple builders. Places of worship they, of course, had, but slight and ephemeral as compared with those of their successors." The religion appears to have been a purely domestic one, no shrines except the cave sanctuaries having been discovered apart from buildings. Each house seems to have had a sort of oratory, |||| while several of these shrines appear in the Palace at Knossos. The Kings and

* Dr. S. Xanthoudides, *Εφημερίς Αρχαιολογική*.

† T. E. Peet, *B.S.A.*, XVIII.

‡ *Liverpool Annals*, V.

§ Evans' *Minoan Tree and Pillar Cult*.

|| Evans in *Encyclopædia Britannica*: "Crete."

¶ Evans' *Minoan Tree and Pillar Cult*.

** Evans in *B.S.A.* XI.

†† Petrie, *Abydos*, Pt. II.

‡‡ *Artemis Prologizes*.

§§ *Handbook of Architecture*, Vol. I., Bk. VI., ch. I.

|||| Mackenzie in *B.S.A.*, IV.

Queens were priest Kings and Queens of whose daily life ritual probably formed a considerable part. *

Amongst the more prominent cult objects were the horns of consecration and the double axes : the former, usually models—though sometimes the actual article—represented the horns of the bull, which animal was sacred and was often killed in sacrifice. The double axes have given rise to much controversy : some holding them to be cult objects,† others attaching no special meaning ‡ to them. The balance of evidence,¶ it must be admitted, is on the side of those who regard them iconastically.

(d)—SOCIAL AND COMMERCIAL LIFE.

First and foremost in the list of commercial occupations must stand the carrying trade of the island : the running of the great fleet of vessels which kept Crete supplied with goods required from overseas and took the products of island manufacture to Egypt or the neighbouring islands. The vessels were of low free-board, with masts and oars,§ and may be seen on seal impressions, frescoes, &c.¶

Agriculture and farming, of course, took a prominent position in island industries : mortars have been discovered on every town site for grinding the grain, while the actual peas and barley have been discovered in many buried jars. The only agricultural implements that have been found are bronze sickles. The vine and olive were cultivated on a large scale :¶ the latter was a staple article of diet and presses and large vats for washing and storing the oil have been discovered.

The manufacture of pottery and metal casting must have engaged a large number of men : crucibles and pots, slag, and numerous moulds have been discovered at several spots,** while colonies of workmen for these two purposes were attached to the Palace at Knossos itself. One of the most interesting finds at Gournia was a complete carpenter's kit consisting of saws, chisels, awls, files, axes and nails, resembling very closely those in use to-day,†† while the mould used by the Gournian smith to cast the various tools required by his customers has been preserved to us.‡‡

Little seems to be known about slave labour in the island, but undoubtedly it existed, and slaves would be employed for the heavier and more mechanical forms of manual labour, as well as for jobs of an unpleasant nature, such as the removal of refuse.

Commercial activities naturally led to the development of a system of weights and measures and a system of writing. The standard of weight was based on the Babylonian shekel of 180 grains : §§ pieces of gypsum, ox-heads of bronze stuffed with lead, etc., served as weights.¶¶ In currency are found ingots of bronze and "dumps" and slices of gold and silver : These were sometimes marked with an H or T.¶¶

The Cretan script was of two types, pictorial and linear. This is not the place to enter at any length into the questions raised by these writings, interesting though they are.*** Beginning as pictograms on three sides of the steatite seals, they developed in the Middle Minoan period into hieroglyphics written on seal stones and tablets. By L.M.I., a linear form of writing, Sir Arthur Evans' Class A,††† has taken the place of hieroglyphics, while another linear form—Class B—appears a little later. These forms of writing lingered on until the centuries immediately preceding the Christian era.‡‡‡

Of the social life of the people, much, of course, can be assumed with a fair amount of accuracy from the remains, but we are fortunate in not having to rely entirely on our imaginations to form pictures of the life of the times, for we have actual pictures remaining to us of scenes in the life of the people, as, for instance, the Miniature Fresco showing a grand court levée with women dancing.

We may well believe that the relation of king and people was very much that of the head and

* Mackenzie in *B.S.A.*, IV.

† Evans's *Tree and Pillar Cult*.

‡ Hawes, *Crete*, ch. xi.

§ Evans in *Encyclopædia Britannica* : "Crete."

¶ Evans in *B.S.A.*, IX.; Dussaud in *Revue de l'Anthropologie*, 1906.

¶ Evans in *Encyclopædia Britannica* : "Crete"; R. C.

Bosanquet in *B.S.A.*, VIII.

** Hawes, *Crete*, ch. iii.

†† Mrs. Hawes in *Gournia, Vasiliki, and other Prehistoric Sites in the Isthmus of Hierapetra*.

‡‡ *Ibid.*

§§ Ridgway in *Journal of Hellenic Studies*, X.

¶¶ Evans in *Corolla Numismatica*.

¶¶ *Ibid.*

*** Mrs. Williams, *Gournia*.

††† *Cretan Pictograms and Pre-Phœnician Script*.

‡‡‡ Hogarth in *Encyclopædia Britannica* : "Ægean Culture."

members of a clan, the king hearing disputes and judging between his people.* There would be a freedom of approach to majesty which is quite unknown at the present time. There seems to have been a highly developed legal organisation, which shows great similarity with the code of Khammurabi and may have been influenced by it.†

Amongst the sports of the people bull fights were perhaps the most popular: again and again they are found depicted in Cretan art, as in the Toreador Fresco which decorated a wall on the east side of the palace of Knossos. It shows a boy and two girls in male attire performing with the bulls. It was probably for this sport that the yearly tribute from Athens of youths and maidens was required. Boxing, too, had a prominent place, as represented on the vase from Hagia Triadha.‡ No mention has yet been made of a pastime that one would naturally expect to find, since we are told that it is "amongst the earliest activities of men"§ and that it is one of the very earliest of the arts||—namely, dancing.

Evidences are not wanting, however, whether from literature or art, that dancing was indulged in, as in the *Odyssey* :—

The dancing floor they levelled, and they made a wide drawn ring,
Therewith drew near the herdmen with the shrilly harp in hand,

And they beat the holy earth with their feet, and Odysseus still
Gazed on at the feet swift twinkling, and his heart was in wonder long.*

Or in the *Iliad* :—

Youths and maidens danced all young and beauteous.**

In some of the frescoes we have the representations of these dancing scenes, as in the north wall of the Queen's Megaron.

Draughts or some similar game seems, too, to have been popular, to judge from the elaborate playing-table discovered in the palace of Knossos. The lyre and the double flute were the most commonly used musical instruments and may be seen in the Palaikastro figurines and the sarcophagus of Hagia Triadha respectively, while the sistrum is shown in the famous "Harvesters" vase.

Dress,†† at any rate that of women, was astonishingly modern. Elaborate tightly fitting bodices, puffed sleeves, and low necks were the order of the day. Bell-shaped skirts seem to have been greatly favoured, and flounces, frills, and such like adornments were freely used. The dress of the men seems to have been much less ambitious than that of the women, except on ceremonial occasions. It consisted of a loin cloth—which garment was also worn by the women—buskins and puttees and a belt to hold the weapons. The men wore turbans and feathered head-dresses on special occasions, while the hats of the women were of a size approaching those of to-day.

Having examined to some extent, though in a somewhat brief and fragmentary manner, the conditions under which the architecture of Crete was produced, we will now proceed to examine at closer quarters that architecture itself; the work which doubtless was to its builders, as to those who have had the privilege of studying it in recent years—

A vision, a delight and a desire—
Thy builder's perfect and centennial flower,
That in the night of ages bloomed alone.†‡

V. THE PLAN.

(a) HOUSE PLAN.

In dealing with ancient architecture, the feature which can usually be studied with the greatest degree of completeness is, as might be expected, the plan. While any part of wall or column or pier

* Evans in *R.I.B.A. Journal*, 1902.

† Burrows, *Discoveries*.

‡ Halbherr in *Rendiconti della Accademia dei Lincei*.

§ Darwin's *Descent of Man*, ch. ii.

|| Baldwin Brown, *The Fine Arts*, ch. i.

* *Odyssey*, VIII. 260-271.

** *Iliad*, XVIII. 592.

†† Evans in *Encyclopædia Britannica*; Mrs. Williams in *Gourmia*.


‡‡ Longfellow, *Giotta's Tower*.

remains standing the plan is preserved, and even when these have gone, some trace can often be found enabling the plan to be reconstructed with a tolerable degree of accuracy. In Crete the student of planning is unusually fortunate, for he has materials for study remaining from Neolithic times onwards.

When the Neolithic people advanced beyond the mere rock shelter and commenced building proper, there seem to have been two lines of development. One was in the direction of wattle and daub huts, such as those of which remains have been found in the Neolithic strata at Knossos; the other a stone type as found at Magasá. The probable reason for this dual type will be dealt with later; suffice it to say here that the plan of the hut type had practically no influence on later planning; * it is the second or house type that is important from this point of view.

The Magasá plan,† which was after the type of A, Fig. 2, shows an approximately rectangular room, with a sort of porch or annexe on its north side. It may be taken as certain that there was an intermediate stage, no example of which has as yet been discovered, between this and the rock shelter, consisting of a single rectangular room with door (Fig. 2 A). The continuity of this Neolithic plan with the planning of the Minoan period proper, receives interesting confirmation from the plan of the early Minoan ossuary at Kastri, which is almost identical in plan (Fig. 2 C) with the house at Magasá.

It is easy to trace the development of the more elaborate plans of Minoan times from these simple beginnings. The addition of another room to the prototype plan to meet the growing needs of the family, might be made by some person of more than ordinarily inventive ability to take not the Neolithic or ossuary form, where it practically forms only a passage and so is not of much use for living purposes, but that shown in Fig. 2 E, where the door is kept directly opposite the original door, and a second useful room is obtained, with the additional advantage of more light penetrating to the inner chamber. Repeat this plan in the approved modern semi-detached style, to accommodate, say, a grown son and his family, and we get a type which is quite normal in Minoan planning, and is represented in Fig. 2 D. An opening was often knocked through in the party wall for convenience of access without the necessity of going outside.

These primitive types of plan can be traced even in the most complicated of later planning. The remarkable adaptability with which these originally distinct units are made to enter naturally and appropriately into complex schemes of planning is indeed one of the triumphs of Minoan architecture. We find the  type in the ranges of magazines at Knossos, while at Phaestos the same type has been transformed and developed, by the addition of magazines on the blank side of the corridor. There was, as has been mentioned, a tendency for each house to have its private shrine or oratory, and the back room through which there was no thoroughfare was the one usually appropriated to the purpose. This, of course, represented the original or hut element of more primitive times. In the palaces the same arrangement persisted; the Shrine of the Double Axes, for instance, is an isolated room, though for convenience there is a thoroughway in front of the shrine; so, too, the Shrine of the Sanctuary; and the so-called "baths" are arranged on a similar plan.

Extensive remains of ordinary domestic work are preserved to us, mostly on town sites. Gournia and Palaikastro, Phylakopi and Zakro have yielded a rich return to the labours of the archaeologist. It will probably be better, instead of trying to reduce to some sort of rule the mass of differing plans which exist—and this would be as difficult to do as it would in the case of the modern suburban villa—to describe some actual examples.

Turning first to the late Minoan plan shown in Fig. 3, we find a house standing free and roughly square in plan, with its entrance opening on to the side street. A and B, the floor of the one ornamented by lines of stucco and the other with a large slab of limestone in the centre, were undoubtedly rooms; the other spaces are only the spaces between the foundations of the walls and columns of rooms above.‡

* The circular form of hut may possibly have had an influence on the plan of some burial chambers. There are circular tholos-tombs at Hagia Triadha, and also a series,

alongside dwellings of an exclusively rectangular type, at Koumasa, discovered by Dr. Stephanos Xanthoudides.

† R. M. Dawkins in *B.S.A.*, XI.

‡ Dawkins in *B.S.A.*, XI.

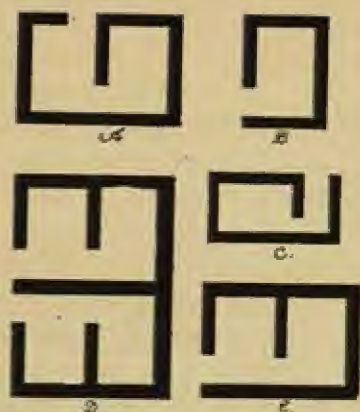


Fig. 2. Evolution of the Plan.

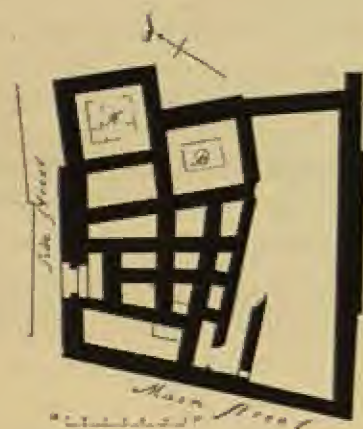


Fig. 3. House at Palaikastro.

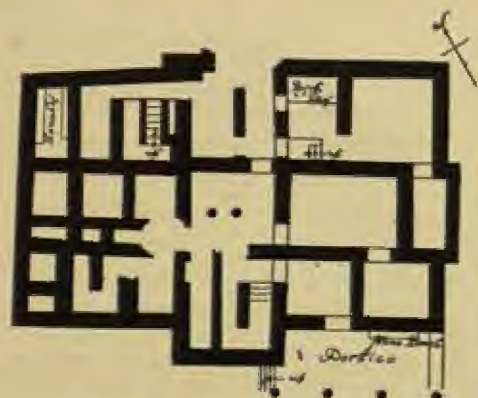


Fig. 4. House at Palaikastro.

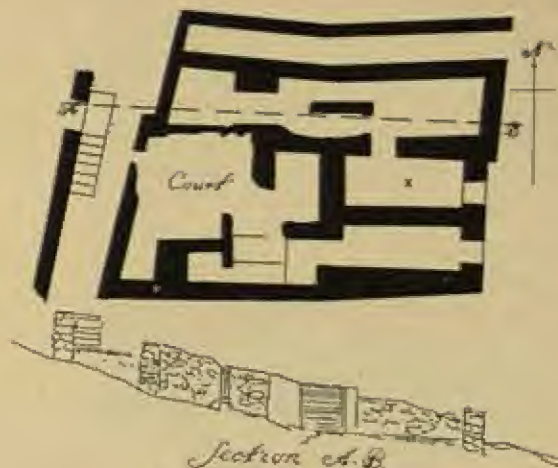


Fig. 5. House at Gournia.



Fig. 6. House at Zakro.

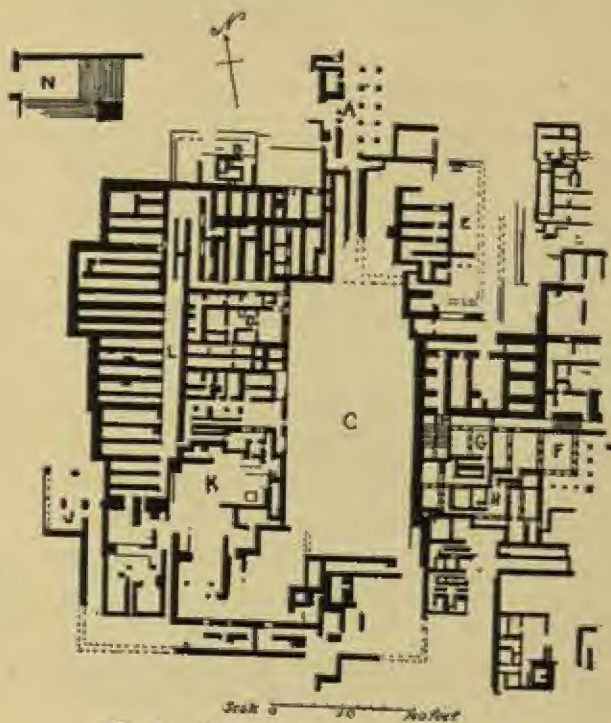


Fig. 7. Knossos: Plan of the Palace.

The irregularity of the planning marks it as being of earlier date than the next example (Fig. 4), which shows a house of two wings separated by, one might almost call it, a projecting staircase hall. A glance at the plan will reveal at once a difference between the west wing and the rest of the house. The west wing reminds one more of the plan previously mentioned; and indeed it is probably very little later in date. The centre and east wing were undoubtedly later additions dating from the period of re-occupation. The plan as a whole is a most interesting one, with its portico and entrance to the east end of the façade, its two staircases, and its interesting arrangement of rooms. One cannot help feeling that its owner must have had a fairly comfortable time.

One example of domestic work has been selected from the countless number of houses that have been uncovered at Gournia and is illustrated in Fig. 5. This, Mrs. Hawes' house A c,* shows the ease with which these Minoan builders seem to have adapted their buildings to sloping sites; there is no need to describe the arrangement of the rooms, as this will be readily seen from the plan given. The other house plan (Fig. 6) is that of a building of Late Minoan date from Zakro. It contained eight rooms, of which those marked 1 and 2 were cellars. This house also shows that adaptation to irregular levels, of which mention has already been made. The elliptical farmhouse at Chamaizi † of M.M. I. is a building freak, and while it may be interesting archæologically is not of great architectural value.

Though the difficulty of reducing the varied plans to a consistent scheme has been mentioned, this does not prevent some very general and very broad underlying generalisations being made with regard to these plans. The plans one notices seem always to have had an antechamber into which the front door opened; from this several doors led to the various rooms, and steps led to the upper storey. A want of doorways in the basements is characteristic, ‡ these rooms probably being reached by means of ladders from the upper floor. The slope of the ground, where it existed, was often utilised to get a door at street level both to the basement and the ground floor.

There seems to have been no separation into men's and women's quarters § in these houses. Each house, where condition of situation, etc., would allow it, had a free space or court in front of it, but, as in the present day, the town house more frequently had to forego this luxury. Where it did exist it might be enclosed by a wall, and was in many cases paved.

(b)—THE PALACE PLAN.

Full of great rooms and small the palace stood,
All various, each a perfect whole
From living nature, fit for every mood
And change of my still soul. ||

It was seen in discussing the house plan that, where it could be managed, the Minoan favoured a sort of court in front of his house. Now if the owner of the house happened to be engaged in farming or some other occupation which required a lot of storage room or workshops, the most natural place to put these would be adjacent to his house along either end of his front courtyard, as is done in so many farmyards to this day. Growing by successive additions, these outbuildings would presently creep round the corners and extend along the front, thus converting the external into an internal court.

It would be a comparatively easy and natural transition for these outbuildings, being so intimately associated with the house proper, to develop into spare rooms, stores, etc., and so become an actual part of the house. We have then, as the result of these transitions, a somewhat elongated central courtyard, whose shape is due to its original position on the main frontage, surrounded by buildings; on one side of the court are the principal domestic apartments of the house, while the other three sides are taken up by servants' quarters, stores, workshops, etc. This is precisely the palace plan, and its evolution from the smallest beginnings is thus quite easy to trace.

* Mrs. Hawes in *Gournia*.

† Mackenzie in *B.S.A.*, XIV.

‡ Bosanquet in *B.S.A.*, VIII.

§ Hawes, *Crete*, ch. II.

|| Tennyson, *The Palace of Art*.



Fig. 8. Knossos: West Court from S.W. Portico.
By permission of the British School at Athens.



Fig. 9. Knossos: One of the Magazines,
showing Pithoi.



Fig. 10. Knossos: Hall of the Double Axes from
the tower.



Fig. 11. Knossos: Upper Flight of the Grand Staircase.
By permission of the Hellenic Society.



Fig. 12. Knossos: Theatral Area.
By permission of the Hellenic Society.



Fig. 13. Knossos: Throne Room.
By permission of the Hellenic Society.

As the general type of palace is the same in all cases, one example only will be taken for detailed description, that of Knossos.

Here the spacious Central Court *c* (Fig. 7) was a paved area of some 20,000 square feet. It was reached from outside by way of the north gate (*A* on plan), which was at the point of junction of the roads from the City and the sea-port, and consisted of an imposing portico of a double row of six piers. From this there was a narrow ascending passage into the court. Opposite the northern part of the portico was a massive tower dominating the meeting-place of the two roads, and this was faced by a massive bastion. Near this northern entrance were discovered six deep walled pits, which were probably oubliettes. East of the entrance were three terraces which were most likely made into small gardens with palms, shrubs, etc. To the west of the palace was a paved court (Fig. 8), which may have been the gathering place of the people, and here was the south-west portico (*x*), which seems to have served a double purpose, that, according to Evans, of the royal entrance to the palace*—though surely not the most convenient way of reaching the royal apartments—and of a lodge for the checking and receiving of goods destined for the magazines of the palace.

Continuing round from the south-west portico there is found on the south of the building the remains of a stately Propylæum overlooking the southern terrace. This gave entrance to a hall leading to a small court, beyond which was a series of small rooms which seem to have been devoted to the use of palace functionaries. On the western side of this block was a corridor some 200 feet long, giving access to a number of magazines, one of which is shown in Fig. 9, which were mostly occupied by large jars for oil—especially during the later part of the history of the palace—but were also used for the storage of valuables. Above this section were the Halls of State, the principal approach to which was by way of the Propylæum already mentioned.

The domestic quarters were situated to the east of the Central Court, and at this point the Palace buildings were at least four stories in height. The principal rooms here were three, the Hall of the Double Axes (Fig. 7 *r* and Fig. 10), the Hall of the Colonnades (*g*), and the Queen's Megaron (*h* and Fig. 14), and in intimate association with these the Grand Staircase (*m* and Fig. 11), which is perhaps one of the most remarkable remains ever brought to light by the archaeologist. Speaking of it in its relationship to the Hall of the Colonnades, Sir Arthur Evans says :†

The lowermost flight of this quadruple staircase descended into a portico forming a wing of a fine columnar hall, between which and the staircase wall was a light area. . . . This hall, to which I have given the name of the "Hall of the Colonnades," is one of the finest features of the building.

North of the Domestic were the Industrial Quarters (*s*), where the potters, goldsmiths, engravers and carpenters lived and worked, and where the olives were pressed and the oil washed and jarred ; while forming as it were a connecting link between the Domestic and Industrial Quarters there appears to have been the school room and the quarters of the scribes who were engaged on the clay tablets.

At a point near the north gate is the theatral area (*x* and Fig. 12), a paved space of some 40 by 30 feet, having tiers of steps on two of its sides, with a bastion at the angle between the two tiers. A very interesting little suite of rooms occupied a position in the west wing, with entrance from the central court, and was probably used by ambassadors and other persons of importance. There was a roomy vestibule, leading to what Sir Arthur Evans has named the Throne Room (*p* on plan and Fig. 13). There was a shallow tank here for ablutionary purposes, and leading out of the Throne Room was a room which undoubtedly served the purpose of the visitor's bed room. A number of detached buildings, such as the South-East House, in more or less intimate connection with the main block, completed the Palace buildings, of many portions of which it will be necessary to speak more fully later.

Attention must now be given to a number of points of interest in the Palace plan generally. The first point which will strike the student is that these Minoan buildings seem to have been planned on rather un-classical lines : there is none of that rigid symmetry and exact duplication of parts which

* Evans in *Journal R.I.B.A.*, 1902.

† *Journal R.I.B.A.*, 1902.



Fig. 14. Knossos: View from S.E. Corner of Queen's Megaron.

By permission of the British School at Athens.

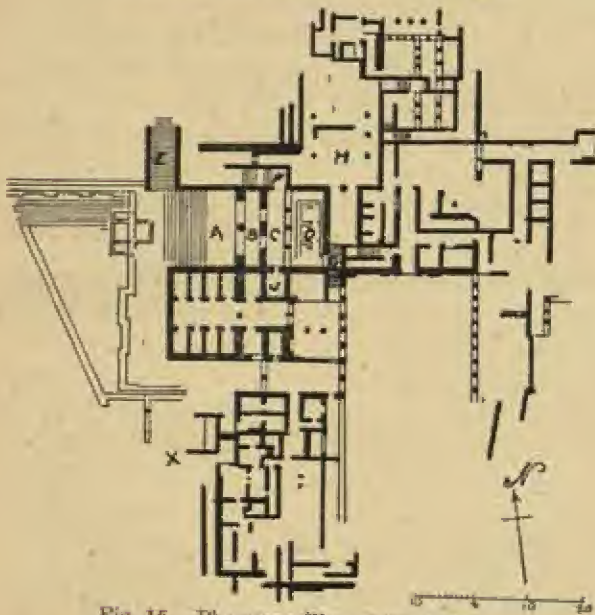


Fig. 15. Phaestos: Plan of the Palace.



Fig. 16. Phaestos: The State Entry.

is found in buildings of later times; the Minoan building seems more like one of our old and rather rambling English manor houses than, say, a building of the Periclean age. To say this, is not, however, to disparage the planning of these places. In nothing, perhaps, do the old Cretan architects show so much skill as in their plans. The skilful way in which the domestic quarters at Knossos are shut off from the more public portions of the building is only one example of this. They are quite secluded, yet easily accessible. The dog's leg corridor (Fig. 14), as a further means of secluding the Queen's Megaron from anyone who might chance to be in the Hall of the Double Axes, was a masterly device which effected perfectly the purpose for which it was intended, though at the cost it must be admitted of a rather serious loss of light in the corridor. Nor, again, must this want of rigid symmetry be taken as in any way indicating lack of stateliness and dignity. The stately line of approach of the South Propylæum at Knossos, with its triple doorway leading into a roomy hall; the entrance to the Domestic quarters by way of the Hall of the Double Axes, with its rows of columns and piers, and the splendid staircase leading to the upper floors and the imposing state entry at Phaestos, all prove beyond any reasonable doubt that the Minoans were keenly alive to the value of scale and right combination of parts as elements in the production of a successful design.

The chief rooms, in the state portions of the palaces, seem to have been arranged above a basement of less important offices, magazines, &c., and the chief entrance was often by way of a staircase from an upper terrace level,* as in the Domestic quarter at Knossos, the South-East House and the Royal Villa. Unfortunately, the great halls of state do not remain to us, and perhaps, even with the knowledge we have of Minoan remains, if we could be allowed a view but for a moment of those halls in the days of their perfection we should be astonished at what was presented to our view.

Differences of levels seem to have been the architects' special opportunity. Their skill in

* Evans in *B.S.A.*, IX.

dealing with problems of this nature is shown admirably in the treatment of the Domestic quarter at Knossos. Advantage was taken of the slope of the hill—which was further cut away where required—to obtain a terrace twenty-five feet below that of the central court on which to commence building operations, and by so doing it was possible to erect the four-story block already mentioned, which had easy access to the court from the upper apartments, was sheltered from the northerly winds, and must in addition have given an imposing elevation.

Nowhere perhaps is the architect's skill in planning shown better than in the state entry at Phaestos (Figs. 15 A and 16). A difficult problem presented itself for solution, namely, to properly correlate and bring into a single whole, two sets of apartments at differing levels. In the Southern portion of the buildings were the principal apartments of state, over a ground floor of less important rooms; to the North, at a level intermediate between these two, was the Ground Floor of the domestic apartments. How was the principal entrance to be arranged with regard to the claims of these different levels? A less competent architect than he who designed this state entry would have given up the task as hopeless, brought his entry into relationship with one floor, and left the rest to come in anywhere. Not so the skilled designer who was responsible for the work. His mind seized the possibilities offered by the very difficulties of the situation: here was an opportunity for masterly planning not to be lost, a chance to show what really could be done. The true solution, in the designer's mind, was to place his entrance portico and its adjacent areas on a different level from all those which it had to serve, namely, midway between the ground floor of the domestic and of the state parts of the Palace. By this means a broad and imposing flight of steps was obtained leading up to the portico (Fig. 16). At the top of the ascent was a spacious landing leading through a typical central columned portico (b) into a sort of crush hall or vestibule (c), at the back of which, separated from it by three columns on a limestone stylobate was a light well (d) of the usual type, but which has been unaccountably mistaken for a megaron by Dörpfeldt and Noack. On the north side of the stairs and landing was probably a loggia, while on the opposite side there was undoubtedly an upper hall above the magazines, to approach which was one of the chief objects of the existence of this state entry.

The entrance was brought into proper relationship with the north wing of the Palace by means of a staircase (f) opening off the north end of the vestibule, which was closed by a door controlled from the stairs side. Communication to the women's quarter was by a door in the east wall of the light well, leading on to a staircase running north and south (g), which in its turn led into a peristyled court (h), both the staircase and court being lit by means of windows from the light well. Southwards the staircase led into the southern portion of the Palace. At the south end of the vestibule a porter's lodge (j) was cleverly contrived, and from this point perfect supervision and control of all the doors could be maintained.

The earlier Palace plans seem to have been quite as extensive as the later ones. The earlier halls of the west wing of the Palace at Knossos were exactly the same size as the later ones, while in one instance at Phaestos an earlier hall appears to have been even larger than the later one.*

The primitive isolation of rooms is apt to disappear when the rooms become units in an architectural system, and especially is this so in Crete, where the system of division by colonnades of piers or columns and of consequent intercommunication between room and room, as shown for example in the Hall of the Double Axes (f, Fig. 7 and Fig. 10) was greatly favoured by the Cretan architect. These arrangements do not pre-suppose any want of privacy, however; the openings are known to have been in many cases fitted with doors which could be closed when required, and in other situations where doors were impracticable, or were not for some reason desired, a system of curtains would supply the deficiency.

This system of colonnades had several most important results: it made the problems of lighting easier of solution; it forced the architect to pay more careful attention to the relationships of room to room—there was not the opportunity to hide bad planning behind the mask of blank walls—and it

* Mackenzie in *B.S.A.*, XI.

gave opportunity for a number of smaller units to be brought into relationship as parts of a larger scheme: the Hall of the Double Axes, which has already been so often referred to, being an excellent case in point. Had solid walls been used here a series of small and unimportant rooms would have been the result, but by the separation of the adjacent areas only by colonnades an area of over twice what would have otherwise been available could be used as a single chamber. This was probably in use as a reception room,* the throne occupying a position in the centre of the north wall, approach being given by the eleven openings of the colonnades. It is not difficult to picture the dignified and imposing effect thus obtained, and the more one considers it the greater is the admiration which will be aroused for the men who, centuries before "The Glory that was Greece," could scheme out such effects.

The number and importance of the light wells which have been discovered justify the conclusion that they formed in conjunction with the colonnades the chief means of lighting, either directly, in the case of the rooms of which they formed part, or indirectly by means of windows. Enough has already been said in speaking of the state entry at Phaestos, to show the great skill with which they were introduced, and a glance at any palace plan will furnish plenty of other examples. These light wells were not, according to Sir Arthur Evans, exclusively what their name implies,† but were also used as a sort of private chapels, &c., even in some cases being partially roofed over.

A word must be said as to the use of windows for lighting staircases: something has already been said on side lighting, the example particularly referred to being Phaestos. Another and most effective method was in use—one that is a favourite with the architect to this day—that of a window on the staircase landing. To take the case of the Royal Villa (Fig. 17), here we have a staircase with a central flight dividing on the first landing into two; on this landing was a large window which lit effectively all three flights. Both at the South East House and at Hagia Triadha a similar arrangement was in existence: at the latter the window also served to light two corridors. These double-headed staircases must have been very effective in appearance; as Sir Arthur Evans says,‡ "It is difficult to avoid the conclusion that this arrangement of a staircase with a double head was adopted by the architect simply with an eye to symmetry and grandiose effect."

The question of the Theatral Area is a most interesting one. It seems to have existed on every palace site; as at Knossos (Fig. 12), Phaestos (fig. 16), and Gournia. In every case the plan is the same: two rows of steps joining at right angles. At Phaestos there is a paved platform at the top of the long range of steps which was originally backed by a massive wall supporting an upper terrace.§ The use to which these areas were put has been the subject of much discussion. Undoubtedly, as the name which has been given to them implies, they were centres of sport where the people would assemble from time to time to see various contests, boxing, dancing, &c. The size of these areas—that at Knossos is, as has been said, about 40 by 30 feet—precludes the possibility of their having been used

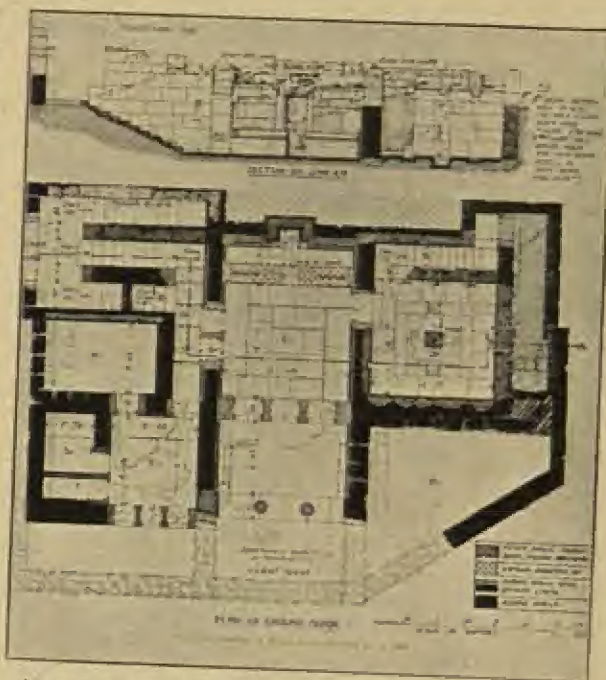


Fig. 17. Royal Villa, Knossos: Plan of Ground Floor.
By permission of the Hellenic Society.

* Evans in *B.S.A.*, VIII.

† *B.S.A.*, XI.

‡ *B.S.A.*, IX.

§ Pernier, *Lavori eseguiti nel Palazzo di Phaestos*.

for the favourite sport of bull baiting. Sir Arthur Evans thinks,* from the way in which the steps overlap and are keyed into one another, that the designers of these areas fumbled about after the idea of seats in a continuous semicircle, but did not manage to hit upon it.

Speaking generally, the existing palaces give plans of great regularity and basic simplicity: angles are right angles, and walls parallel; the most difficult problems of planning are treated in a straightforward and workmanlike manner, and differences of level and upper stories are ordinary matters of everyday occurrence and are dealt with most successfully.

(c) THE PALACE PLAN AND THE MAINLAND TYPE.

An observant student of Minoan architecture is bound to be struck by the great dissimilarity between the plans of the Cretan palaces and those of the mainland. Yet it has been agreed that the people of these various mainland towns sprang from the same peoples as the Cretans, and were indeed in a very real sense part of the same civilisation. Why then this difference? If the origin of the people, and consequently of the plan, was the same, the subsequent development ought naturally to be on similar lines.

The explanation is, that the final results were merely the outcome of a gradually divergent development owing to difference of climatic conditions, or, to put it in the words of Dr. Mackenzie: †

The process of differentiation at the opposite poles of Crete and Thessaly respectively, took place on gradually diverging lines. And it is this process of gradual differentiation that accounts for the enormous difference in character in the final outcome of architectural design as represented respectively by the palaces of Crete and those of Arne, Tiryns, and Mycenae.

The whole question may be said to centre round the two types of hearth—fixed and portable. In Crete, where the climate was warm, a portable brazier was all that was required for heating purposes, but further north, at Mycenae or Tiryns, the greater rigour of the winter climate would require a fixed fire of respectable dimensions. The fixed fire would require a smoke-hole in the middle of the roof; so no upper story could be built over the lower room. Again, with a fire in the centre of the room no thoroughway could be allowed; entrance and exit must be from one side of the room; otherwise the draughts would cause the smoke to whirl and eddy about and go anywhere except out of the opening intended for that purpose. This blocking of thoroughway would cause to spring up, before very long, a system of surrounding corridors by which it would be possible to get from one room to another without passing across a third. Thus a system of disconnecting corridors would come into being merely on utilitarian grounds, and a plan such as that of Tiryns would be the result. In addition, the increasing rigour of climate would make undesirable the number of openings which allowed of such thoroughgoing intercommunication between room and room in Minoan palaces.

The necessity, too, on the mainland of keeping the whole building within the fortifications, meant that there would be a certain crampedness and want of room compared with Minoan palaces, where no fortifications had to be considered as none existed: there were none of "these tough walls" ‡ to withstand siege which are found on mainland sites, the Minoans preferring to trust to their navy rather than to walls, and only taking precautions, as in the northern entrance at Knossos, against robbers or perhaps a riot amongst the people. There can hardly be any question as to which set of circumstances produced the finer plans, and this difference in style gives what is perhaps one of the clearest object lessons we could desire as to the importance of such points as geographical conditions in determining the plan.

(To be continued.)

* *B.S.A.*, IX.

† Mackenzie in *B.S.A.*, XI.

‡ *Iliad*, XXII. 6.

REVIEWS.

TREATMENT OF OLD COUNTRY HOUSES.

Small Country Houses: their Repair and Enlargement. Forty Examples chosen from Five Centuries. By Lawrence Weaver. 4s. Lond. 1914. 15s. net. ["Country Life," 20 Tavistock Street, Covent Garden.]

Following so soon after Mr. W. A. Forsyth's Paper* on "The Repair of Ancient Buildings," Mr. Lawrence Weaver's new book on "Small Country Houses: Their Repair and Enlargement" is indeed a sign of the times. As a believer in a living architecture one cannot, however, admit that it is an entirely healthy sign that so many folk now prefer to "rough it," to some extent, in an old house with its frequent and familiar discomforts, rather than to live in a "purpose-made" house designed by a competent architect; but the fact remains that the former proceeding is now rather fashionable, and, that being so, it is only fitting that *Country Life* should endeavour to educate the public it has so long fascinated with such a fine series of photographs of beautiful old buildings.

If only present-day opinion had ripened a century earlier, how much richer should we be in unrestored monuments of the past! But since so many are gone, it behoves us, especially architects, to care for and lovingly preserve what is left. It would be presumption for us arbitrarily to decide whether this or that is beautiful and worthy of preservation; the broader view should be taken that when a structure is reasonably old it is history and should be treated with the reverence one has for an Old Master. Fashion is so fickle that what is considered ugly to-day may very well be admired to-morrow, and *vice versa*. Whatever our private opinions may be of any particular building or feature thereof, they should be rigorously suppressed if such opinions are at variance with one's own idea of what is beautiful. Of course it is sheer affectation to copy exactly the work of the past: it is not art, nor is it sincere. Therefore if we must repair or adapt, let us do it in an unobtrusively distinctive and modern manner, always harmoniously and without destroying.

Mr. A. C. Benson† lately remarked, with much truth, in speaking of the wrong kind of modern restoration, that it "... is not a departure, it is a tame virtuosity, desiring if possible to reconstruct a vanished atmosphere without any real knowledge of what that atmosphere actually was ...". In fact, it is as unreal as many of the historical pageants that were so prevalent a few years ago. It must be admitted that it is not easy to reconcile any modernising process with the preservation of the charm of age, but nevertheless this frequently has to be attempted; how successfully, in many cases, may be judged from the photographs reproduced in Mr. Weaver's book.

He rightly emphasises the point in his Introduction, which may be read and re-read with much profit by all who have charge of ancient buildings, whether as owners or otherwise.

The illustrations here reproduced, by the courtesy of the publishers, from the early pages of the book, show quite painfully the evils of conjectural restoration and how easily the beauty of age can be ruthlessly destroyed within a few days. The Guildhall at Lavenham, Suffolk, is a case in point, and the pity of it is that the unfortunate result was entirely unnecessary, and therefore avoidable. The other example, from the same county, is of less importance, but the actual house to-day is even more amusing than the photograph (taken while the "restoration" was in progress) shows it to be.

As a contrast to these the book itself contains typical examples of old houses rightly repaired or enlarged. These extend to two hundred pages, and are selected from the works of architects with a real appreciation for the work of our forefathers. By the time one has reached the end of so appetising a meal, one has almost forgotten that the *hors d'œuvre* was so thoroughly indigestible (vide Illustrations I., II., III., IV., V. and VI.).

Especially successful is Mr. William Weir's repair and adaptation of the Town Hall at Watlington. The author very naturally singles it out for praise. Sir Lawrence Gomme's "The Mound," at Long Crendon, Bucks, cleverly converted by his son, Mr. Austen Gomme, is irresistible in its charm. Mr. Basil Stallybrass (like Mr. William Weir) is referred to in the heading of chapter ii. "as an exponent of the S.P.A.B. principles," and right well do both these architects follow them.

Some good brickwork by Mr. H. M. Fletcher is shown in chapter xxxi., and mention should also be made of Mr. Walter Cave's admirable treatment of Mr. and Mrs. Asquith's little riverside retreat at Sutton Courtenay, Berkshire. A less experienced architect—yielding perhaps to the pressure of a client—might easily have fallen into the trap of more or less imitating the old timber-framed building, but Mr. Cave knew better, and wisely designed his new building in a manner dissimilar to the adjacent existing work, precisely in the same spirit that a builder of the seventeenth or eighteenth century would have approached his task. There is nothing in the least discordant about the juxtaposition of the two types of building.

Mr. Weaver endorses this view, which is one that is gaining ground daily, thanks primarily to the well-sustained persistence of the Society for the Protection of Ancient Buildings (from the time of its inception by William Morris nearly forty years ago), which was never allowed to flag for a moment, in the face of much hostility, under the able and energetic guidance of Mr. Thackeray Turner.

Country Life has ever been the enemy of shams and "fakers," and it has consistently furthered

* JOURNAL R.I.B.A., 20 Dec. 1913.

† In an address on "The Beauty of Age," read before the Society for the Protection of Ancient Buildings at the general meeting on 10th June last, published in their Annual Report and in the *Cornhill Magazine* for July.



THE GUILDHALL, LAVESHAM, BEFORE ALTERATION.



THE GUILDHALL, LAVENHAM, AFTER ALTERATION.



AN EAST ANGLIAN HOUSE, BEFORE "RESTORATION."



AN EAST ANGLIAN HOUSE, AFTER "RESTORATION."

the cause of sincerity in architecture, but no book is likely to do more for that cause than Mr. Lawrence Weaver's opportune and very welcome *Small Houses: Their Repair and Enlargement*.

One might wonder, with the eagerness of a reader of serial stories, what is to be the fate of "A derelict awaiting repair" (at the very beginning of the book), but there need be no anxiety on this account, for it is now in the hands of Mr. Harry Redfern. Let us hope that his treatment of it—for a sympathetic landlord—may be one of the delights that a possible sequel to this interesting book may have in store for us.

BASIL OLIVER [A.]

ARCHITECTURAL DRAWING.

Shades and Shadows, with Applications to Architectural Details and Exercises in drawing them with the Brush and Pen. By William R. Ware, formerly Professor of Architecture in the Massachusetts Institute of Technology. 80. 1912. [International Text-book Company.]

This businesslike book is written with that originality and thoroughness which are characteristic of Professor Ware's welcome contributions to architectural educational literature. The revival of the employment of shadows and rendering is looked upon by some merely as a fashionable trick of draughtsmanship. But the study of the phenomena of light and shade and its effect on the appearance of solid forms is in reality of paramount importance to the architect. It is striking to note that when in this country the practice of indicating shadows was allowed to fall into disuse, the period was remarkable for an unequalled poverty of conception in design. As the author points out, the problems presented in architectural drawings are few and comparatively simple, and are of such frequent occurrence, under almost identical conditions, that they can advantageously be solved once for all and the results formulated for future use.

The book is arranged in two parts, the first preceded by an Introduction dealing with the phenomena of light and shade—direct, diffused, and reflected—on rough, smooth, and polished surfaces of various materials. The two parts deal respectively with rectilinear solids and curved lines and solids of revolution. In each part the more theoretical exercises are followed by "Architectural Applications," showing the systems applied to familiar architectural forms, a method which has the double advantage of combining branches of elementary study and of direct utility. In addition to these chapters, projection, perspective, and trigonometrical terms are explained in an appendix. The short article on perspective is suggestive and to the point, but while there are, of course, many advantages in placing the object at angles of 45 degrees to the picture plane, one cannot agree with the statement that this is usual in oblique perspective; or, again, that "the advantages of adopting any other angle would be equally well secured by setting the object over to the left or right."

A great number of problems are worked out, and in cases where there are several methods of solution all are given—a principle which, as the author says, is calculated to secure for the study of shades and shadows the educational and disciplinary advantages which are often sought to be obtained by the study of the more indirect and artificial procedures of descriptive geometry.

The numerous line illustrations are clear and often very ingenious in conception. The practice of giving in many cases perspectives and perspective plans in addition to the orthographic projections should prove a great help to the student in exercising his imagination in terms of three dimensions by means of graphical discussion.

The profession is fortunate in having the results of the researches of such an authority as Professor Ware available in such convenient form, and the student who masters the contents of this volume will be fully equipped as far as these branches of draughtsmanship are concerned.

LESLIE WILKINSON [A.]

Autumn Publications.

Messrs. B. T. Batsford announce the following:—

The English Parish Church: an Account of the Chief Types of Buildings produced in England during Eight Centuries. By the Rev. J. Charles Cox, LL.D., F.S.A. With over 350 illustrations reproduced from photographs and drawings, including a specially prepared series of plans.

Bruges. A Record and an Impression by Mary Stratton (Editor of "Fellowship Books"). With 120 drawings specially done for the work by Charles Wade. La. 80. Chapter V., which gives an interesting analysis of Bruges domestic architecture, is contributed by Mr. Arthur Stratton [F.]

Batsford's "Library of Decorative Art" (size 14 inches by 10½ inches):—

(1) *Decoration in England, from 1660–1770.* By Francis Lenygon. With over 350 illustrations.

(2) *Furniture in England, from 1660–1750.* By Francis Lenygon. With over 400 illustrations.

(3) *Tapestry Weaving in England, from the Earliest Times to the end of the 18th century.* By W. G. Thomson. With 57 illustrations.

A Town Planning Text-book.

The National Housing and Town Planning Council announce the publication, on the 1st October, of a concise History of the Town-Planning Movement, combined with a Text-book on Town Planning, written by their secretary, Mr. Henry A. Aldridge, with an appendix by Mr. Frank M. Elgood [F.] and Mr. Edmund R. Abbott (solicitor), respectively Chairman and Clerk of the Ruislip-Northwood Urban District Council. Mr. Aldridge's share of the work is in two parts—I. The Case for Town Planning; II. A Practical Manual for the Use of Councillors, Officers, and others. The Appendix consists of the annotated text of the Act and of the Procedure Regulations, the various notices, advertisements, certificates, etc., required, and the text of the Birmingham and the Ruislip-Northwood Town-Planning Schemes.

THE TOLL OF BARBARISM.

"Without being able to plead even military exigencies, and solely for the pleasure of destruction, the German troops have subjected Rheims Cathedral to a systematic and furious bombardment. At the present moment the famous basilica is no more than a heap of ruins. The Government of the Republic finds it necessary to denounce to universal indignation this revolting act of vandalism which, by handing over to the flames a sanctuary of our history, has robbed humanity of an incomparable portion of its artistic patrimony."—THE FRENCH GOVERNMENT'S PROTEST. |

THERE are many things in the world which can never be paid for. The destruction of Louvain, Dinant, and Rheims Cathedral can never be paid for, and can never be atoned for.

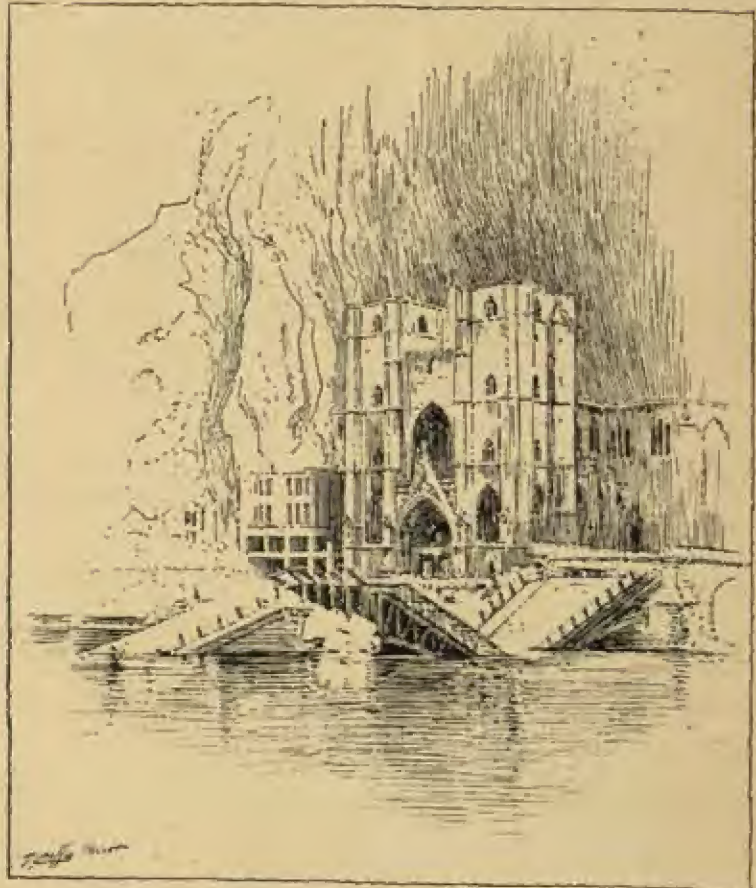
How and why the word "culture" was brought forward on behalf of the Germans it is hard to know. But Germany has now added to all its diplomatic follies (which have placed it in the wrong before the whole world) a crowning crime against the world of art and culture. Objects of enduring beauty and delight which graced the fair lands of France and Belgium and gave everlasting pleasure to the wide world are being destroyed, from no other motives than those of blind barbarism and revenge. Nothing can ever reinstate German rulers in the eyes of the world of art after such brutal acts as these. No millions of war indemnity and no wild glut of revenge could ever undo the harm and loss. Germany has injured the world past all reparation.

It must always be borne in mind that a church like that of Notre-Dame at Dinant is not only of value in itself, but stands as the central feature in endless views of beauty up and down the Meuse. We may, in serene heights of pure architectural thought, reflect on the oddities and incongruities of the bulbous-shaped spires of Belgium, but who would have wished to dismantle the steep tower roofs and curious spire of Notre-Dame at Dinant? It has never been suggested that this pure thirteenth-century church should be more suitably crowned, and, now that the roofs and spire are gone, shall we be likely to see a thirteenth-century restoration of the upper portions of the church which have been blown away? Such picturesque beauty spots which have grown up from the traditions and genius of the Belgian people are dear to us all, and we view with dismay and horror the insane folly and blind fury which cause their destruction.

The picture of Dinant as we knew it with the picturesque spire and sturdy towers of Notre-Dame dominating the old houses and graceful bridge, outlined against a beautiful background of wooded rocks and set in a foreground of placid river, is gone for ever



Dinant as it was



Dinant as it is

as the consequence of war against a ruthless and barbarian foe.

It is difficult to realise the loss the world has suffered at Rheims. This great cathedral church, where the ancient kings of France were crowned, which sums up in its fabric the unity of Gothic art, which has been styled the Parthenon of French national art—this was the heritage whose loss we mourn. When we think of its great west front, its glorious glass, its typical mediæval sculpture, its endless features of interest and charm, words fail to express the loss to the architectural world. The whole profession is in protest against the wicked and senseless folly which dooms such records of human genius to the flames. In face of such disasters as these we are at first struck dumb, but one would like to think that the Royal Institute of British Architects would in some way voice the indignation of its members, and at least place on record its reprobation of such a crime.

T. RAFFLES DAVISON [*Hon. A.*].

SIR THOMAS JACKSON, R.A., in a letter to *The Times*, says:—

The loss to art by the destruction of Rheims can hardly be conceived. In it French Gothic reached its climax. It had advanced a step beyond Chartres, which has about it still something tentative, and it stopped short of the incipient weakness of Amiens. It was the very crown and flower of French Gothic. The apse and chapels of Jean d'Orbais set the pattern for all that followed, and have never been surpassed. "This is how we must do the work at Cambrai," wrote Wilars de Honecort against the sketches he made of them while the walls were rising. The sculptures were unrivalled even by those at Chartres, and were finer than anything at Amiens. The groups of the Annunciation and Salutation in the west portal were comparable to the antique, with an added spirituality wanting in ancient art. The clerestory was filled with glorious glass of the 13th century like that at Chartres, Bourges, and Canterbury. All, or nearly all this we must have lost irreparably. The glass must have been blown out by explosions, and the lovely statuary must be shattered and defaced. How much of the main walls and the great arcades with their beautiful capitals, or the storied west front with its wealth of imagery both inside and outside, is capable of repair and preservation we shall hope to know before long. I fear there will be little enough.

We are told there was no military reason for this outrage. The Cathedral was, in fact, serving as a hospital for German soldiers, who barely escaped destruction by the shells of their own side. Its ruin was simply an act of brutal savagery to glut the rage of an invader disappointed of the conquest of which he had made sure. And where is it to stop? Noyon, with a great cathedral scarcely less important to art, is not safe; Laon, with its stately nave and its five

steeple, is at the enemy's mercy; St. Quentin, with its fine church and its delightful Hôtel de Ville, lies in the path of his retreat and may share the fate of Louvain.

OBITUARY.

The late Edward Ingress Bell.

I am asked to write a short personal note of my late friend, as a man, and I wish I had his own literary skill to do justice to the subject. It is said that some men are so endowed that they pass through life without making enemies; if it is so, most certainly Ingress Bell was one of them. Gifted with a charming presence and personality, his sympathetic nature had the happy faculty of extracting the good out of all with whom he came in contact and leaving them better than he found them. Superior in endowment to most men he met, he was careful not to assert it.

Among his friends in early life was W. Eden Nesfield, with whom he worked of an evening and for whom he always retained a great admiration. J. F. Bentley was another of his lifelong friends, and he delighted in reminiscences of both of them. His architectural work was his main interest in life, but by no means his only one. A loyal Fellow of the Royal Institute of British Architects, he was always ready to support it, but he was in no sense a party man and took little interest in architectural politics; he read several delightful papers, full of literary merit, before both the Institute and the Architectural Association. A keen though kindly critic, he was enthusiastic in his admiration of the work that appealed to him; when it did not, he simply passed it by on the other side. He won the devotion of all the staff with whom he worked, who would have done anything for him. Of a retiring disposition, it was difficult to persuade him to make a speech, but he could do so when he chose with great effect, as we all knew at our friendly office dinners, when in a few words he would say exactly the right thing in perfectly chosen language. Shakespeare, Thackeray and Charles Lamb were his favourite authors, and he would quote from them with extraordinary accuracy and appropriateness, and was also a delightful raconteur.

Bell and I carried out a large amount of work together without any agreement other than an occasional letter between us, and without difficulty of any kind, and when the time came, through failing health, for his retirement we separated with much regret, and I can only say for myself that without him life can never be to me the same again. He was first of all an artist in all his work and in his outlook on life. This never left him though he had to work hard to maintain himself and his family. Accustomed at the War Office to large schemes, he was equally skilful in laying out a large plan and in raising an elevation upon it, the two being practically worked out simultaneously. He was a very fine draughtsman, and at the same time was thoroughly practical. A man of extra-

ordinary though restrained energy, he has left a worthy monument behind him in the large amount of beautiful work that he did and in the devotion of his friends. Though fully equipped with archaeological knowledge, he was never a copyist in any sense.

Bell had in a marked degree the saving sense of humour and kindness, which carried him through the troubles and anxieties of life without embittering him. He was deeply interested in the War, but never doubted we should win through; he used to say that "this was no ordinary war, and that it would have a great dramatic ending." We shall see! When some four years ago ill-health came he uncomplainingly laid aside his work, though with the greatest regret, disposed of the house which he had built for himself at Sutton, and retired with his family to Worthing, a favourite place of his. There he was devotedly attended by his wife and daughters to the end, which came suddenly and painlessly, and he was laid to rest in the cemetery at Worthing on a cloudless day surrounded by his family and a few faithful and lifelong friends. *R.I.P.*

ASTON WEBB [*F.*].

By the death of Mr. E. Ingress Bell the profession has sustained a severe loss; and to those who knew him, especially the younger members, to whom he was ever a friend, his death will be deeply deplored. It was my privilege to know him for many years, first as one of his assistants, then as a friend. It was always a delight to me to work for him, ever full of encouragement and enthusiasm, ever ready to help with his wide professional knowledge and artistic sympathies. He was the truest of friends, a most lovable man, possessed of an old-world charm and courtesy which endeared him to all. In spite of his great attainments he was singularly modest and retiring, and it was characteristic of him that, where possible, he avoided publicity and eschewed honours, preferring rather to accomplish his work and remain in the background. Such was Ingress Bell as I knew him. He has gone full of years and honour—his gain, our loss.

W. BEVAN [*F.*].

Edward Ingress Bell was specially educated for the profession by his father, himself an architect (and for a time clerk-of-works for Sir Gilbert Scott), and was afterwards placed by him in the office of Mr. Thomas Page, C.E. From there he went to the office of Sir Charles Barry, and subsequently to that of Mr. Joseph Hansom. He commenced practice in London in 1860 with Mr. H. V. Bacon, and in addition to his private practice was for many years employed as "First Class Surveyor" in the War Office. Among his earlier works were the following:—schools at Brent's Court (Southwark), Bungay, Guildford, Windlesham, Bagshot, Orphanage and Schools at Kilburn, the Masonic Hall at Ipswich; St. Joseph's Church, Guildford; Restoration of St. James's Church, Icklingham; Church House and Schools at Cater-

ham; important country houses, including Dedworth Manor, Clewer, and The Grange, East Sheen, and residences at Watford, St. Albans, Catford Bridge, Kilburn, Sutton, etc.

In the early 'eighties Mr. Bell became associated with Sir Aston Webb in the competition for the Admiralty and War Offices, with the result that they were included in the second competition and were awarded the third premium. The same architects won the open competition for the Victoria Law Courts, Birmingham, and the Christ's Hospital Schools, Horsham, both of which buildings they carried out. They also erected in collaboration the Birmingham University, the Metropolitan Life Assurance Society's building in Moorgate Street, the Royal United Service Institution in Whitehall, additions to Caius College, Cambridge, the rebuilding of the Museum at St. John's, Newfoundland, etc.

Mr. Bell was elected an Associate of the Institute in 1866, and Fellow in 1894. He had served on the Art Committee, acting for a time as Hon. Secretary, and had assisted the activities of the Institute in various other directions. His contributions to the transactions at general meetings include Papers on "The Criticism of Architecture" [*TRANSACTIONS*, 1868-69, pp. 148-160], "The Modern Barrack: its Plan and Construction" [*TRANSACTIONS*, 1880-81, pp. 15-40], and a short Paper on the Treatment of Terra-cotta [*TRANSACTIONS*, 1892-93, pp. 207 *et seq.*]. He retired from practice in 1909, being then in his seventy-third year.

The late Mrs. Arthur Cates.

It is with great regret that we have to announce the death of Mrs. Arthur Cates, who passed away after a short illness on the 19th of last month. The late Mr. Arthur Cates was a tireless worker in promoting the objects of the Institute, and one of the most active members it has ever possessed. After his death Mrs. Cates maintained the interest shown by her late husband in the philanthropic work of the Architects' Benevolent Society. No necessitous case was brought to her attention without receiving her sympathy and help. To the Library of the Institute she made considerable gifts of valuable books, now contained in a book-case which she also presented, and which formed part of Mr. Cates's library. Her latest gift was the large collection of photographs of architectural subjects collected by Mr. Cates on his foreign travels, together with the cabinet in which they are preserved. The Institute has lost a friend and benefactor by her death; and those to whom she was personally known will not readily forget her amiable and kindly qualities.

RUDOLF DIRCKS, *Librarian*.

The deepest sympathy is felt by the Institute with its esteemed Hon. Fellow, Lord Plymouth, whose gallant son, Lieut. the Hon. Archer Windsor-Clive, fell in one of the earliest fights of the War.



2 CONDUIT STREET, LONDON, W., 26th September 1914

CHRONICLE.

The War: Destruction of Architectural Monuments.

The following correspondence has been handed in for publication:—

11th September 1914.

His Excellency, The American Ambassador—

SIR,—In conjunction with the Royal Academy, the British Academy, the Society of Antiquaries, the Society for the Protection of Ancient Buildings, the National Trust, and the Art Workers' Guild, this Institute desires to appeal to you to enlist the influence of the United States of America in a matter which is felt to be of serious importance.

The destruction or damage by the Germans of many fine old buildings at Louvain and Malines, besides lesser works of ancient architecture in France and Belgium, gives good cause of fear for the safety of some of the very finest mediæval and other buildings of France. Therefore it is that we appeal to you, not only for our own satisfaction, but also in the interests of civilisation and particularly for the sake of posterity, to request your Government to make strong representations to the German Government to insist that the armies of that country respect all old buildings having historic or architectural interest, and all works of art or the buildings that contain them.

We firmly believe that representations on this subject on the part of the United States of America would carry very great weight with the German Government, and, having regard to the unanimous expression of regret at the destruction or damage which has already occurred, we sincerely trust that you will see your way to do all that you can to secure the intervention we suggest.

I have the honour to be, Sir,

Your obedient Servant,

ERNEST NEWTON,
*President of the Royal Institute of
British Architects.*

[REPLY.]

*Embassy of the United States of America,
London: 14th September 1914.*

Ernest Newton, Esq., A.R.A., President R.I.B.A.—

SIR,—In reply to your letter of the 11th September,

the Ambassador desires me to say, in reference to the request made by you, in the name of the Royal Institute of British Architects, that the Government of the United States make representations to the Government of the German Empire to the effect that buildings having an historical or architectural interest be respected in military movements, that your communication has been referred to the Department of State, Washington, for its consideration.

Yours faithfully,

JORDAN HERBERT STABLER,
Second Secretary of Embassy.

The Architects' War Committee.

11th September 1914.

The Rt. Hon. J. A. Pease, P.C., M.P.—

SIR,—The Royal Institute of British Architects, feeling it to be their duty in this national emergency to arrange for such collective action by the architectural profession as may be found to be desirable, have, with the co-operation of members of other architectural bodies, formed an Architects' War Committee which is broadly representative of the whole of the profession in the United Kingdom.

This Committee desires to offer to His Majesty's Government an assurance of the loyal and energetic support of the profession in any direction which may be found to be practicable and desirable.

It is felt that the Imperial Government is best able to indicate what form of assistance would be of most value to it and the Committee would welcome any suggestion from the Government in this direction.

The Committee is prepared to furnish information on all matters in which the State may require the services of architects in any part of the United Kingdom during the period of the war and to give advisory assistance in connection with any schemes of construction which the Government may contemplate in this emergency.

We have the honour to be, Sir,

Your obedient Servants,

ERNEST NEWTON, P.R.I.B.A.,

Chairman, Architects' War Committee.

C. STANLEY PEACE,

Hon. Sec., Architects' War Committee.

[REPLY.]

Whitehall, S.W.: 14th September 1914.

C. Stanley Peace, Esq.,

Hon. Secretary, Architects' War Committee—

DEAR SIR,—I have to thank you on behalf of the Government for your letter of the 11th September and for the generous and patriotic offer of help made by the Architects' War Committee. I am forwarding your letter to other Government Departments, and if any opportunity of utilising your help arises a further communication will be sent to you.

Yours faithfully,

JOSEPH A. PEASE

Mr. C. Stanley Peach, Hon. Secretary of the Architects' War Committee, has issued the following circular:—

Although it may be presumed that most of the architects who have had to leave their work in order to join the Armed Forces were able, before their departure, to place their work in the hands of colleagues and friends, yet it is thought probable that cases may arise in which it will be difficult for architects to find suitable substitutes. In such cases architects are invited to note that the Architects' War Committee, already formed, is willing to give advice and help. The extent and nature of the help offered may be classified as follows:—(a) Undertaking complete charge of an office; (b) Carrying on in all its phases a specific piece of work; (c) Visiting a specific piece of work and reporting to office only; (d) Dealing with clients, builders, and general matters; (e) Providing draughtsmanship directly or indirectly; (f) Giving only general advice on and when required.

Readers in sympathy with the Committee's efforts can help in one or more of the following ways:—

1. By writing to the Hon. Secretary, Architects' War Committee, 9 Conduit Street, Hanover Square, London, offering their services, when a form will be sent to them inviting specific information as to the extent and nature of their generosity, should this be called upon.

2. By sending this announcement to colleagues who have already joined the Forces, and who are known or supposed to require assistance.

3. By intimating their own intention of joining the Forces, and the general nature of the professional circumstances which will result, when another form will be sent with full details.

4. By drawing the attention of others likely to be interested in this movement, whether prospective donors of services or military patriots.

The War Committee desire to emphasise that their offer of help is extended to all architects, whether or no they be members of any organised architectural body.

The Committee also wish to call the attention of those desiring of joining the Army to the fact that certain advantages may be obtained by recruits by joining through the Architectural Association rather than through other channels.

The War and the Proposed New Charter.

Corn Exchange Chambers, Wharf Street, Sheffield :
6th August 1914.

The Secretary R.I.B.A.—

DEAR SIR,—May I ask what effect the present international crisis will have on the proceedings of the Institute with regard to the New Charter.

As you know, my colleague, Mr. Wrench, and I represent many hundred Licentiates who wish to protest against the Charter being granted in its present form, and in justice to them we should like to know the intentions of our governing body.

As an ex-Volunteer it is probable that I may be called upon for service, and I understand that Mr. Wrench may be affected in the same manner.

Is it possible, therefore, for your Council to give an undertaking that the matter shall be so adjusted that time be guaranteed after the war for our appeal against the Charter?

May I also ask that your reply to this letter be framed in such a way that it may be published in the London papers and the architectural journals? It is very desirable that those who are supporting us should know the reason for the suspension of action, and the publication of this letter, and your reply thereto, will save a great amount of correspondence.—Yours faithfully,

FRANCIS A. WINDER.

In the absence of the Secretary the matter was referred to the President, who replied:—

10th August 1914.

Francis Winder, Esq.—

DEAR SIR,—In reply to your letter of the 6th inst., you may take it for granted that the Council of the Institute will not be occupied with the consideration of the New Charter, or take any steps in connection with it, at the present time.—Yours faithfully,

ERNEST NEWTON.

President R.I.B.A.

Architects' Special War Relief Fund.

The following appeal has been issued:—

The Royal Institute of British Architects, feeling it to be their duty in this national emergency to arrange for such collective action by the architectural profession as may be found to be desirable, have, with the co-operation of members of other architectural bodies, formed an Architects' War Committee which is broadly representative of the whole profession in the United Kingdom.

It is felt that a contribution by the whole body of architects to the Prince of Wales's Relief Fund will not only secure a larger donation and enable all to help, however small a sum they are able to subscribe, but that the donation given in this way may encourage others to a like effort.

The Committee will be glad to receive contributions to this Fund.

While, however, it is most important that the National Fund should be supported, the Committee cannot be blind to the fact that there is likely to be a great deal of temporary distress among architects.

The Board of Trade Returns for the month of August show the immense diminution of trade already caused by the War, which cannot fail to have a serious effect on the work of our profession. The funds at the disposal of the Architects' Benevolent Society are quite inadequate to cope with such an emergency. The War Committee therefore hope that all architects who are in a position to do so will give the most generous support to the "Special Fund"

intended mainly for the assistance of architects and for other matters arising from the War which may affect our profession.

Donations should be sent to the Hon. Secretary, The Architects' War Committee, 9 Conduit Street, Regent Street, W.

The Architectural Association: War Service.

The Architectural Association have issued the following circular:—

18 Tufton Street, Westminster; 12th September 1914

SIR,—For the convenience of all members of the architectural and kindred professions and their friends who wish to respond at once to Lord Kitchener's appeal, the following arrangements with the various authorities have been made:—

LORD KITCHENER'S ARMY.

All men enlisting at Whitehall in any branch of His Majesty's Regular Forces, through the Architectural Association, will be sent to whichever regiment they may choose, provided it is not recruited to its full strength, and they will be kept together as far as their duties will allow.

Our President and a number of members have already been accepted for the Royal Engineers, where as Sappers they will find their civil training gives them a great advantage. Those who prefer to join the Cavalry, Artillery, or Infantry, can do so, and I am arranging with the recruiting station in the City to send applicants to them for enlistment in the units being reserved for City men.

The term of enlistment is for the war, and the age limit is 19 to 35. Pay at the usual army rates.

A special branch of the Motor Transport Corps is now being formed to collect and repair the numerous cars attached to the Allied Forces in the field. A limited number of recruits are required immediately.

Every man applying must be a mechanic skilled in motor repairs, and he should state whether he can bring his own car or motorcycle.

Pay for the lowest rating will be 3s. 3d. a day. As the Corps is expected to leave England shortly recruiting must be rapid, and men wishing to join, who have the necessary qualifications, should communicate with me at once.

Work in the profession is likely to become scarcer as the war continues, and to economise employment is most desirable. All assistants and others eligible for Kitchener's Army should not hesitate to join at once, leaving their berths to those who from age or health cannot be accepted, and who may otherwise be out of work.

In this connection, I understand that the Royal Institute of British Architects is arranging for the work of younger men in practice, who wish to join the forces, to be looked after during their absence.

TERRITORIALS.

Foreign Service.—The Foreign Service battalion of "The Artists" is at full strength, but a few picked men are being enrolled as a reserve, and they will be trained in the 2nd battalion until vacancies occur.

Home Defence.—A second battalion of "The Artists" is being formed for Home Defence and a few vacancies have been reserved for members of the A.A. and R.I.B.A. Members applying to me direct will be furnished with an introduction to the Head Recruiting Officer.

Men of the second battalion will live at home at present.

Term of enlistment, 4 years. Pay 1s. a day, and 2s. a day allowance until barracks are provided.

The Territorial Engineers are not at present recruiting for Home Defence.

ARCHITECTURAL ASSOCIATION VOLUNTEER TRAINING CORPS.

The A.A. Volunteer Training Corps, as originally proposed by Mr. Maurice Webb, is now being formed in connection with the Central Volunteer Training Corps Committee, of which

Lord Desborough is Chairman. This Committee has received permission from the War Office to encourage and create Training Centres throughout the Kingdom for men who are ineligible for Lord Kitchener's Army or the Territorials, or who are prevented by special circumstances from joining the Forces.

The A.A. Corps, of which the Rifle Club will form the nucleus, is open to all Architects and Surveyors, and members of kindred professions; the only qualification being that they are prevented from joining the Army as at present constituted.

The Headquarters of the Corps will be the Central Electric Supply Co.'s Station, Lodge Road, St. John's Wood, where there is ample accommodation for miniature rifle practice, revolver practice, drill and skirmishing.

Members can drill any day of the week except Sundays, and obtain musketry practice likewise, except on Tuesdays and Thursdays.

There is an entrance fee of 5s., and a subscription of 2s. a month, but this latter is liable to be increased if the price of ammunition advances.

Rifles and revolvers of service weight are provided for musketry practice at the ranges, with an allowance of 21 rounds of ammunition per day free of charge, and members will be able to purchase further supplies at the range if required.

The general equipment of the Corps will depend on private effort to a great extent, but assistance will also be obtained from the Central Volunteer Training Corps Committee.

It is not proposed to limit membership of the Corps in any way, except as stated above, and I should be glad to receive names of intending members as soon as possible.

All applying should state clearly why they are unable to join the army, and when enrolled they will be furnished with a Special Pass, to admit them at Headquarters.

ALAN POTTER,

Hon. Sec., A.A. War Service Bureau.

The R.I.B.A. Record of Honour: First List.

Intimation has been received that the following Members, Licentiates, and Students R.I.B.A. have been accepted for service with the Regular or Territorial Forces until the conclusion of the War:—

FELLOWS.

Cooper, William: Lieut.-Col. Commanding 5th Batt. Duke of Wellington's Regt. (T.F.).
Corlette, Hubert C.: Major, King Edward's Horse (King's Overseas Dominions Regt.), Special Reserve Cavalry.
Fletcher, H. Phillips: Major, 1st Co. of London Yeomanry (Duke of Cambridge's).
Martin, A. C.: University and Public Schools' Brigade.
Maule, H. P. O.: Honourable Artillery Company.
Milne, O. P.: 28th Co. of London Terr. (Artists').

ASSOCIATES.

Adams, L. K.: Lieut., 7th King's Liverpool Regt. (Terr.)
Ball, J. Henry: Surrey National Reserve, Woking, late Captain R.G.A. (R.)
Barnish, Leonard: "C" Co. Liverpool Scottish.
Bausor, T. P.: 1st (Reserve) Batt. Herefordshire Regt.
Bennett, Philip D.: Lieut., 5th Batt. R. Warwickshire Regt.
Bennett, Thorold: 5th Batt. W. Kent Regt. (Queen's Own) (Territorial).
Benayn, W. T.: Royal Engineers.
Beswick, W.: Captain, 5th Royal Welsh Fusiliers.
Binning, Alan: London Scottish.
Birnstingl, H.: 9th County of London Batt. (Terr.)
Blackford, A. G.: The Artists'.
Brittan, H. W.: Commission in New Army or Territorial Force.
Broad, Kenneth: Artists' Rifles.
Bull, J. W.: Artists' Rifles.
Bunce, H. E.: Royal Engineers.
Butler, A. S. G.: "B" Battery, H.A.C.
Carus-Wilson, C. D.: Officer, 1st County of London Yeomanry (Duke of Cambridge's).

Clarke, John M. : Artists' Rifles.
 Clarke, L. H. : 5th West Yorks Regt.
 Cockrill, O. H. : Captain (Terr.)
 Colthurst, W. B. : Somerset Division Lord Kitchener's Army.
 Cook, J. O., Jnr. : Captain, Territorials.
 Cooper, A. : Royal Engineers.
 Cowdell, C. J. M. : University and Public School Corps.
 Crawford, C. : Terr. Force, Record Office.
 Curtis, S. Carey : Capt. and Hon. Major, O.C. R. Guernsey Eng. (Militia).
 Dixon-Spain, J. E. : Lieut., R.F.A. (Special Reserve).
 Gibson, E. H. : Royal Naval Volunteer Reserve.
 Gotch, L. M. : Royal Engineers.
 Grant, F. T. W. : Royal Engineers.
 Grice, W. S. : The Artists'.
 Ground, J. K. : Honourable Artillery Company.
 Guthrie, L. Rome : London Scottish.
 Hack, M. S. : Q.M.S., Artists' Rifles.
 Harris, Philip Capes : 3rd City of London R.A.M.C. (Terr.)
 Hatchard-Smith, W. H. : The Artists'.
 Hayward, A. B. : 3rd Co. 3rd Batt. "The Buffs."
 Hett, L. K. : Royal Engineers.
 Hill, J. : Hon. Artillery Company.
 Hill, R. H. E. : Honourable Artillery Company.
 Hitch, J. O. B. : The Artists'.
 Horsfield, J. Nixon : Royal Naval Volunteer Reserve.
 Hosking, T. S. : Royal Engineers.
 Kennedy, E. R. : 2nd Lieut., 8th Batt. Royal Irish Rifles.
 Kirk, Albert E. : Lieut.-Col., O.C. 7th Batt. W. Yorks Regt.
 Lawcock, Arnold : Royal Field Artillery.
 Lowe, A. E. : in a Northumberland Regiment.
 McDermott, W. Kingsley : Royal West Kent (Terr.)
 March, J. E. : Civil Service Rifles (Terr.)
 Martin, J. G. : R.E., No. 2 Billeting Co., Chatham.
 Matthews, Bernard F. : Officer, 1st Wessex Brigade, R.F.A.
 Milburn, Stanley W. : Northumberland Hussars (Yeomanry).
 Milburn, William, Jnr. : 3rd Northumbrian Brigade, R.F.A.
 Moberly, A. H. : Lieut., 1st Surrey Rifles (Terr.)
 Moore, H. E. : Lieut., Roy. Monmouthshire R.E., No. 1 Co.
 Morgan, E. E. : Glamorgan Yeomanry.
 Murrell, H. F. : Artists' Rifles.
 Newton, W. G. : The Artists'.
 Pigott, R. M. : Royal Engineers.
 Pope, A. : Mounted Infantry.
 Quirke, W. Dalby : 5th City of London Regt. (London Rifles).
 Rhind, T. Duncan : Major, 5th Royal Scots (Queen's Edin.).
 Rose, Charles H. : 9th County of London (Terr. Regt.)
 Scott-Moncrieff, W. W. : Royal Engineers.
 Searle, Sydney : Lieutenant, Royal Naval Volunteer Reserve.
 Sturgeon, R. V. : 2nd City Batt. Manchester Regt.
 Sutherland-Greene, H. V. : London Scottish.
 Sutton, B. H. : University and Public Schools Corps.
 Swindells, F. H. : Royal Engineers.
 Tanner, E. J. : Artists' Rifles.
 Tapper, M. J. : The Artists'.
 Topham, G. R. : Artists' Rifles.
 Walker, E. Holsworth : Captain, 5th K.O.Y.L.I. (Terr.)
 Walker, J. W. : Capt., Deeside Batt. Gordon Highlanders.
 Watson, Bryan : The Artists'.
 Wheeler, Christopher W. F. : Sussex Yeomanry.
 Wilson, Allen W. : Lord Kitchener's Army.
 Wilson, H. J. : 6th Batt. Northants Regt.
 Wyllie, W. Barnett : O.C. No. 5 Co. Forth R.G.A. (Terr.)
 Yetts, L. M. : Commission in New Army or Territorial Force.

LICENTIATES.

Botting, Milton : Royal Engineers.
 Brown, John : Capt., 4th Batt. Northants Regiment.
 Craigie, James H. : 7th Batt. Highland Light Inf. (Terr.)
 Crombie, W. F. : Capt., 5th King's Own Scottish Borderers.
 Conliffe, T. H. : Inspector of Buildings (E. Lancs. Div. Area) for use as hospitals, etc., Lieut.-Col. Retired List (Terr.)
 Fry, P. G. : Capt., 2nd Wessex R.E. (?) (Terr.)
 Godman, C. E. B. : Capt., Royal Sussex Regt. (Terr.)

Goosling, J. H. C. : Sergt., Cycling Corps, 9th Hants (Terr.)
 Griffith, G. R. : Terr.
 Henshaw, Frederick : Lieut., Terr. Force Depot, Andover.
 Holman-Hunt, H. L. : Burmah P.W.D. Volunteers.
 Landstein, Arthur : Lancashire Hussars Yeomanry.
 Lovegrove, Gilbert Henry : Honourable Artillery Company.
 Mackinnon, W. :
 MacNaughton, A. G. : Lieut., 9th (Glasgow Highlanders) Batt. Highland Light Inf. (Terr.)
 Newton, F. G. : The Artists'.
 Nicholson, A. T. : 4th Border Regt.
 Smith, C. Bouton : King Edward's Horse (Terr.)
 Tate, J. Duncan : Lieut., 22nd Batt. County of London Regt.
 Winder, F. A. : Roy. Garrison Artillery.
 Wingate, Alex. : L.-Corpl., 9th (Glasgow Highlanders) Batt. Highland Light Inf. (Terr.)

STUDENTS.

Addy, F. A. : Royal Engineers.
 Aldous, C. F. : Hon. Artillery Company.
 Archer, H. D. : Hon. Artillery Company.
 Barrowcliff, A. M. : Lieut., 5th Leicestershire Regt.
 Bennett, Gwyn : 5th Batt. W. Kent Regt. (Queen's Own) (Terr.)
 Bonser, K. J. : The Queen's 24th County of London.
 Cheriton, W. G. L. : The Artists'.
 Ching, W. T. : King Edward's Horse.
 Dicksee, H. J. H. :
 Dowsett, T. W. : Hon. Artillery Company.
 Jones, L. F. : Commission in New Army or Territorial Force.
 Lawton, W. V. : Regulars.
 Lawton, W. V. : Terr.
 Mountford, E. W. : Terr.
 Nightingale, F. B. : The Artists'.
 Odom, J. H. : Derbyshire Yeomanry.
 Page, James : Lieut. (Terr.)
 Pidsley, W. G. : Terr.
 Silcock, A. : Artists' Rifles.
 Thomson, J. S. : 14th County of London (London Scottish) (Terr.)
 Walker, D. H. : Lieut., 5th Batt. A. (Prince of Wales's Own) Yorks. Regt.
 Whitehead, H. M. : Commission in New Army or Territorial
 Wilson, J. : The Artists'.

Mr. Maurice Webb (son of Sir Aston Webb), President of the Architectural Association, has joined the Royal Engineers with several other members of the A.A.

The Ruislip-Northwood Town Planning Scheme.

With the Order made by the Local Government Board approving the Ruislip-Northwood Town Planning Scheme as modified by the Board the final stage in the procedure relating to this scheme has been reached. In accordance with Article XXI. of the Town Planning Procedure Regulations (Preparation of Schemes by Local Authorities), 1914, notification has been made that the Order of the Board giving its approval, together with a copy of the map referred to in the Scheme, may be inspected and any necessary explanation or information in regard thereto may be obtained, without payment of fee, at the office of the Clerk to the Urban District Council of Ruislip-Northwood, Oaklands Gate, Middlesex, on any Saturday between 10 a.m. and 1 p.m., and on any other weekday between 10 a.m. and 5 p.m. during a period of three months from the 7th September 1914. Clause 56 of the Schedule attached to the Order provides that in case of dispute or difference between the Urban District Council and any other person as to the

Council's requirements with regard to the general character or design of the buildings to be erected, the matter shall be referred to an arbitrator to be appointed by the President of the R.I.B.A. The decision of the arbitrator is to be final and conclusive and the reference to arbitration will be deemed a reference under the Arbitration Act 1889.

University of London: Department of Town Planning.

The Department of Town Planning at University College, Gower Street, has been established in order to provide a systematic course of training for architects, engineers, and surveyors who are desirous of acquiring expert knowledge in the laying-out of towns. The foundation of a School of Town Planning in London should attract not only students who may be permanently resident in the metropolis and its vicinity, and who may be desirous of availing themselves of the advantages of a university training in this subject, but also students from the Colonies, America and the Continent. The Department is an integral part of the School of Architecture, and students of Architecture and of Town Planning will work alongside one another in the studio. Architectural students who may have obtained a degree or certificate in Architecture are advised to proceed to a course in Town Planning. Professor Adshead [F.], the Principal of the School, will deliver a Public Inaugural Lecture on "The Democratic View of Town Planning" on Thursday, 15th October, at 5.30 p.m., and will give during the Session courses of lectures on (A) Town Planning; (B) Civic Architecture and Landscape Design; (C) Town Furnishing. The Engineering Aspect of Town Planning will be dealt with by Professor Matthews, Municipal Hygiene by Professor Kenwood, and a course of eight public lectures on "The Relation of Plants to Architecture" is to be delivered by Mr. T. G. Hill, beginning on 13th October.

L.C.C. Central School of Arts and Crafts.

The Central School of Arts and Crafts, Southampton Row, W.C., which was established by the London County Council to provide instruction in those branches of design and manipulation which bear on the more artistic trades and manufactures, has done much to raise the standard of artistic production. Every opportunity is given to students to specialise in relation to their particular calling by affording fuller opportunities for design and practice in various branches of their craft than can usually be obtained in the ordinary routine of a workshop. In the School of Architecture and Building Crafts individual instruction is given from the point of view that architecture should take its form in response to present requirements and materials grounded on the past experience of building processes, the solution of the given problems being affected by considerations of æsthetic selection. The programme for the session includes a course of lectures on "The Growth

of a House," given on Friday evenings from 8 to 9.30, and a course on English Gothic Art on Wednesday evenings from 8.15 to 9.30. Classes are held at the Victoria & Albert Museum, S. Kensington, on Saturdays, from 11 a.m. to 1.30 p.m., and from 2.30 to 5 p.m. to study architecture, sculpture, decoration, metalwork, furniture, etc.

Architectural Courses, Westminster Technical Institute.

*The Westminster Technical Institute was established in 1890 by the Baroness Burdett-Coutts, and was presented by her to the London County Council in December, 1900, in order that the Council might continue the educational work then being carried on in the Institute. The Westminster School of Art, established in the Royal Architectural Museum, was transferred to the Technical Institute in 1903, and now forms an integral part of it. Classes in life drawing and modelling are a special feature of the work. A new building, containing well-equipped studios, lecture and class rooms, drawing offices and workshops, was opened in 1908, and provides greatly improved accommodation for the various classes.

Architectural group courses of instruction have been arranged to enable students engaged in the offices of architects, surveyors, etc., to follow out a systematic course of study extending over several years, and involving attendance for three evenings a week. The courses may be varied, with the approval of the Principal, to meet the requirements of individual students. Home work is set each week, and visits are arranged to buildings under erection, and to museums or buildings of historical interest, with the view of encouraging studies and the making of measured drawings of the latter. Every facility is afforded students to prepare Testimonies of Study for the R.I.B.A. Examinations.

The lecturers and teachers for Architectural Design, History of Architecture and Building Construction, comprise Mr. W. T. Benslyn [A.], Mr. Matthew J. Dawson [A.], Mr. W. J. Wilsdon [*Licentiate*], and Mr. F. C. Webster [A.].

Full particulars may be obtained from the Principal, Mr. J. Stuart Ker, Vincent Square, S.W.

The Public Library, Kingston-upon-Thames.

Mr. ALFRED COX [F.] writes:—"In the obituary notice of Mr. Dare Clapham, in the August number of the JOURNAL, it is mentioned that he carried out the Public Library at Kingston-upon-Thames in conjunction with me. This is not correct, as although he helped me with the execution of the competition and general drawings he had nothing whatever to do with the designing, detailing, or carrying out of the work. This was entirely my own personal work."

Erratum.—The Hon. Secretary of the A.A. serving on the Architects' War Committee is Mr. H. M. Fletcher, not H. P. Fletcher, as given in the last issue, p. 648.



Fig. 18. Palaikastro: Main Street.
By permission of the British School at Athens.

MINOAN ARCHITECTURE: A STUDY OF PRE-HELLENIC ART IN CRETE.

By ALEXANDER R. C. EATON.

Essay submitted under the motto "*Daedalus*," awarded a Certificate of Honourable Mention in the Competition for the R.I.B.A. Essay Medal 1914.

(Continued from page 676.)

(d) THE STREET PLAN.

THERE is an indescribable something which one feels in walking the streets of a long-deserted, long-forgotten town. What scenes do not these silent, grass-grown, or *débris*-strewn streets give rise to; what pictures do they not call up of those who once hurried along them in pursuit of business or pleasure, or stood at their corners discussing the political situation, or the state of the crops, or the latest designs in wearing apparel. What tragedies and comedies of love and life have been played out upon the little stage of these streets; how many pulses have leapt at the sound of a lover's footstep echoing upon the flags; how many a fair beauty has known the faithlessness of the gallant who had but played with her. What pestilences may have swept those streets from time to time, leaving a grim trail of sorrow and disease and death; or perhaps it was a human tide that swept them, and, as it receded, left its pitiful mark in burnt homes and slaughtered men and dishonoured women, while the rovers made away with their booty before the country could be roused. Now all is still, with a strange, almost unearthly stillness:

the very houses seem asleep;
And all that mighty heart is lying still.*

and it is the sleep, the stillness of death, from which there is no waking. Truly it is no wonder if these sepulchres of past activity call up in us feelings often too deep for full expression.

* Wordsworth, *Miscellaneous Sonnets*, Pt. II., No. 36.

As with the buildings so with the streets, there does not appear to have been much attempt at symmetrical planning. The two town sites which have been most completely excavated—Gournia and Palaikastro—both show extremely irregular planning. At Gournia, which is built on a sort of Acropolis, a road, accounted for by the nature of the site, completely encircles the town, meeting at the southern end of it in a sort of market-place or agora, in front of the palace of the local governor. Another, the valley road, bisects the town from north to south, while two—the southernmost considerably curtailed by the palace site—cross from east to west. In addition there are various short turnings, which serve to give access to buildings lying off the chief roads.

To turn to Palaikastro (Roussolakkos)—which is not yet completely excavated—we have a long main street running south-east by north-west (Fig. 18) which gradually turns until it is running in a south-westerly direction. From this various roads lead off at right angles.

The average breadth of the main street at Palaikastro was two metres,* at Gournia† and Phylakopi‡ it was somewhat less. The side-streets were naturally narrower, being in some cases

less than a metre wide, as at Praesos (Fig. 19). There is an exception to this at Palaikastro where the side street between blocks β and μ is over 12 feet wide. The streets were paved with stone. The roadway leading westwards from the Theatral Area at Knossos had a good foundation and was paved with very fine slabs bordered on each side by a sort of side walk of pebbles, clay, and pounded potsherds, with a hard rammed surface.§ The total width was about 11 feet.

At Gournia the paving stones were selected, we are told,|| from near the sea, and presented consequently a fairly smooth surface. They were laid with care, and, though not always fitting closely one to another, made a far better road than those found in Crete to-day. Short lengths of side path and gutter occurred at intervals, often approached by steps and leading to the doors of the houses (as on plan, Fig. 5). The streets themselves were stepped, as has already been mentioned, where necessary, as shown in the view of Praesos (Fig. 19). A fine example of this stepping is illustrated in Mr. Dawkins' paper on Palaikastro.¶ In this example the steps are more than a metre on tread and have an imposing appearance. They do not quite reach the wall on one side, but are stopped off to allow the passage of the channel which runs down one side of the road.

and was quite necessary to help carry off the water after heavy rains. Even when all had been done that was possible, the steep streets of some of the Minoan towns must after severe storms have presented somewhat the appearance of cataracts.

Traffic in a Minoan town must have been entirely of a pedestrian or equestrian nature, as chariots



Fig. 19. Praesos: Street ascending Acropolis.
By permission of the British School at Athens.

* R. M. Dawkins in *B.S.A.*, XI.
† Mrs. Hawes in *Gournia*.
‡ R. C. Bosanquet in *B.S.A.*, IX.

§ Evans in *B.S.A.*, X.
|| Mrs. Hawes in *Gournia*.
¶ *B.S.A.*, IX.

could never have got along most of the streets, and, even if width had allowed of their passage, the differences of level and consequent steps would have made progress any distance impossible.

Perhaps one of the most striking things about the Minoan towns is the closeness with which the houses are packed together; made all the more remarkable by the absence of any necessity to keep the houses within the limit of walls, for the latter, as has been mentioned, were quite dispensed with. We cannot help feeling, with all the past has left us, that it is quite impossible to realise adequately what the busy life must have been in these old towns, and there is a tinge of sadness in the thought that all that remains to us is—

Many a street
Whence busy life hath fled;
Where, without hurry, noiseless feet
The grass-grown pavement tread.*

VI. THE ELEVATION.

The question of elevation is perhaps the most difficult which has to be dealt with in any attempt at a systematic study of Minoan architecture. One has to rely almost entirely for knowledge on what can be gleaned from the plan, and on the faience plaques from Knossos, which give a number of elevations of town houses, towers, &c., of quite moderate dimensions. No attempt will be made here to put forward any elaborate theories as to elevation, a few points only being mentioned in illustration of certain broad principles which can be laid down with some degree of safety. Fig. 20a shows us an elevation of which the plaques give us several fairly complete examples. The original of this was, in modern terms, a half-timber building, round beams in timbered compartments forming the most prominent feature. This house has two doors, with windows immediately above, and a sort of garret window in the centre above this. The other elevation (Fig. 20a) shows what appears to be rubble faced with plaster.

It has been suggested that the Minoans were indebted to Egypt for much in the elevation of the

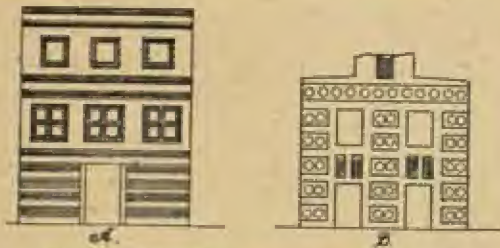


Fig. 20. Elevations from faience plaques.



Fig. 21. The Pyxis of Melos

ordinary house.† The typical house had its broad front to the street, and the front door was in earlier times almost invariably towards the right-hand end of the façade,‡ both in the smaller houses as at Magasá and Kastri,§ and the palaces, as the M.M. I. palace at Phaestos (x on plan) and Gournia.|| This partiality for eccentric doorways, the result of the primitive type of plan, persists until the beginning of Middle Minoan times. The arrangement of porticos on the central column principle, as at Phaestos, seems to have been a typical one, and would give an elevation rather peculiar to those used to arrangements with central opening.

Windows seem to have been in greater favour for upper than for ground floor use. Those shown on the plaques are invariably on upper floors, though the remains have shown their use in the lower parts of the buildings. Verandahs were probably used in some buildings if the suggestion that has been made regarding one of the houses at Palaikastro be correct.¶ The Pyxis of Melos (Fig. 21),

* Wordsworth, *Incident at Bruges*.

† Perrot and Chipiez, *Histoire de l'Art dans l'Antiquité*.

‡ Mackenzie in *B.S.A.*, XIV.

§ *Ibid.*

|| Mrs. Hawes, *Gournia*.

¶ R. C. Bosanquet in *B.S.A.*, XI.

while it must not be taken too seriously as representing an actual elevation, is at least suggestive, especially with regard to the entrance with its gabled portico.

The terraces and flat roofs, rising in great steps one above the other, must have given to the elevations that Oriental aspect with which all who have visited the East must be familiar. We can well believe that the general effect must have been most satisfactory. The architect who was capable of achieving such splendid results—speaking now from the point of view of exterior effect alone—as have been attained in the state entry at Phaestos (Fig. 16) or the Northern or Propylæum entrances at Knossos, cannot have been insensible to the effect of his building as a whole, and the first approach to such a building as the Phaestos Palace, rising high above the plain, must have been an experience long remembered. Even now in the days of its ruin it is impressive enough to one who sees it for the first time. A good idea of what must have been the effect of the interiors may be obtained from the restoration which has been carried out in the case of the Grand Staircase and Hall at Knossos. To quote Sir Arthur Evans's own words concerning it:*

As a whole this legitimate process of reconstruction is such that it must appeal to the historic sense of the most unimaginative. To a height of over twenty feet there rise before us the Grand Staircase and Columnar Hall of Approach, practically unchanged since they were traversed, some three and a half millenniums back, by Kings and Queens of Minos' stock, on their way from the scenes of their public and sacerdotal functions in the west wing of the palace, to the more private quarters of the Royal household.

One can well believe that the ambassadors who came to Crete from Egypt or elsewhere would carry back with them such a story of stately buildings and developed civilisation that their monarchs would treat this little island empire with considerable respect.

VII. CONSTRUCTION.

(a) WALLS.

Sunk are thy bowers in shapeless ruin all,
And the long grass o'ertops the mouldering wall.†

Questions of construction must always be of very great interest to the architect, since every other question, whether it be the size of an opening, the style of the carving on a frieze, or the enduring power of the fabric as a whole, must rest ultimately on the basis of materials and construction.

There is often considerable difficulty, more particularly at Knossos, in distinguishing what was part of earlier construction and what was added later, as the later builders often incorporated old walls, and even made use of old systems of construction in their additions and alterations, much as, say, an old church partially destroyed by fire will be treated in the present day. No stone walls have been discovered in the Neolithic remains at Knossos. This, to those who know the stone building of Neolithic times at Magasá and the abundance of local stone used later at Knossos, will appear very curious. The explanation lies in the fact that the stone at Knossos is not a surface stone. Small stones fixed with mud were used, according to Pernier, in Neolithic building at Phaestos.

Mud bricks were plentifully used—except at Knossos, where there seems to have been a sparing use of inferior bricks—throughout the different periods, and probably played an important part in Neolithic huts. The peculiar yellowish brown soil resulting from the calcined remains of brickwork is one of the most frequent and most trusted indications of a hidden site. These bricks were often well made and very durable. They varied in size from about 2 ft. square to 13½ in. by 12 in.,‡ and were 3½ in. to 4 in. thick. They were usually laid in a kind of mud mortar. A very usual method of employing them was to use rubble for the walls of the lower story and employ brickwork above. In other cases, as house A at Zakro,§ walls were carried up from the ground in brick. In such cases stone was still used for the foundations.

* *B.S.A.*, XI.

† Goldsmith, *The Deserted Village*.

‡ D. G. Hogarth in *B.S.A.*, VII.

§ *Ibid.*

Mud-built walls were occasionally employed, but the favourite material for walling in the ordinary houses was rubble: this was also largely employed in the walls of more pretentious buildings, as the Palace at Gournia.* The extensive use of rubble for walling led to the use of a system of timber framing between which the rubble was filled in, as at Knossos.† The wooden posts represented in the Temple Fresco are of great interest in this connection. The black squares recurring at intervals undoubtedly represent the ends of cross pieces socketted into the posts.‡ In the Palace construction it is usual to find large corner blocks of gypsum having grooves to give the rubble a good hold. Where rubble work was employed the usual process was to put in good stone footings and then build upon these. In house A Palaikastro the corner stones of these footings are very large.§

As might be expected, early methods of construction lingered on in remote country towns long after they had been superseded by more up-to-date methods at the great centres; but even the conservative builders of the smaller towns at last adopted better methods, as at Palaikastro, where the earlier masonry of small stones roughly dressed, gave way to fairly regular coursed work, in which limestone from Cape Sidhero was largely used.|| Ashlar of Paros stone was not usually used until L.M. III. At Gournia except in some parts of the Palace no ashlar appears to have been employed at all; ¶ rubble and sun-dried bricks with the usual timbers were in normal use. The stones used were water-worn boulders and limestone, while a small amount of slate, gypsum, and sandstone was also employed.** In the earlier work the small stones were set in a relatively large mass of clay: the whole was then given a good finish by the application of a hard lime plaster. Later—as in the Town Period at Gournia ††—larger flat-faced stones were used with less mortar, the stones being wedged in with spalls, while in the other cases small boulders and round stones were employed.

Building was better, according to Mrs. Hawes,‡‡ in the first and third periods, than in the second, because in the first the builders were using materials which were easy to work with—small stones and clay—and in the third they had obtained mastery over difficult materials, while in the second they were struggling towards efficiency. This theory of decrease of efficiency, though it sounds plausible, seems to the author to be false at bottom, because decrease of efficiency must mean, surely, a decrease of energy and power, whereas the reverse was in reality the case: the builders were going onwards all the time, as is evidenced by the very fact that they had the courage to attempt building in more difficult materials than they had yet handled. There is undoubtedly progress from the beginning of the first period onwards, and it is the last period when decrease of efficiency and decline take place.

Ashlar limestone construction was throughout the Minoan Age, Dr. Mackenzie tells us, a continuous tradition of palace architecture.§§ This was mainly due to practical considerations, such as the necessity for its use in such positions as the terracing up of slopes, as, for instance, in the East Bastion at Knossos. It seems to have been an unwritten law of the best architectural practice to use ashlar construction in all positions where the stonework would be subject to the effects of the weather, as in the light well to the state entry at Phaestos, the Court of the Distaff, or the east façade of the Palace of Knossos. The extremely massive construction of the north façade of the central court at Phaestos—the whole of which was built in fine ashlar work—was probably ||| owing to the violent wind and rain storms its builders knew it would have to withstand. In ashlar work the courses were sometimes laid receding, the face of the stone in one course being set back a little from that of the course below.

Gypsum and limestone were frequently used in combination. In the west wall of the South-East House there is a base of limestone, with a plinth of similar material upon it: this is surmounted by three courses of gypsum, and then two more of limestone. The whole had a rubble backing.

* Mrs. Hawes in *Gournia*.

† Evans in *B.S.A.*, VII.

‡ Fyfe in *Journal R.I.B.A.*, 1902.

§ Bosanquet in *B.S.A.*, VIII.

|| R. M. Dawkins in *B.S.A.*, XI.

¶ Mrs. Hawes in *Gournia*.

** *Ibid.*

†† *Ibid.*

‡‡ *Ibid.*

§§ *B.S.A.*, XI.

||| *B.S.A.*, XI.

Strange as it may seem, there appears to have been a great desire to economise ashlar work; and it is the normal practice for thick walls to consist of two faces of massive slabs—usually of gypsum or limestone—with a core of rubble. The whole was tied together by cross-pieces of wood which were let into dovetailed slots in the inner faces of the slabs.* This combination of wood with masonry existed throughout the whole of the Minoan period. It became ingrained in the minds of the builders from constant use in connection with rubble work and was still used when the need for it no longer existed. The short beams laid across the thickness of the wall are found repeated in ashlar work at Knossos, while the presence of a horizontal course of wood, immediately under the coping of a dwarf wall or at some intermediate point in the wall, as in many of the rooms at Knossos, was quite normal. In some cases, as in the Royal Villa, there were thin walls of gypsum slabs with clay filling between. The gypsum wall to the staircase in the same building is one of the finest pieces of masonry yet discovered.

Walls were sometimes built against the earth or the solid rock, in which case great care was taken to guard against damp. In the case of that portion of the Palace at Knossos bordering the staircase, the Court of the Distaffs, &c., where the wall was below natural ground level, two walls were built,† one only a few centimetres from the other, thus forming an air space to prevent the passage of moisture. At other points light areas, corridors, &c., were arranged directly about these outer walls.

In later remodellings old walls were often fronted ‡—sometimes with a space of some feet between the two, as in the Central Court, Knossos—with new erections of the later builders. Partitions were in many cases very thin, sometimes no thicker than those in the modern suburban house; they were composed of various materials, gypsum slabs being a favourite one. Some of these thin partitions were undoubtedly strengthened by wooden framing.§ Sliding wooden partitions were probably used || in some positions, as on the low terrace wall west of the magazines of the Knobbed Pithoi, where they probably partitioned off kennels.

The plastering was often very thick owing to its being applied to rough rubble walls, the backing of coarse stuff being sometimes as much as 2½ in., while the finishing coat was usually ¾ in. in thickness, though on some of the thin partitions which have been already mentioned it was not more than half an inch, while on the splendid gypsum wall in the Royal Villa at Knossos, already referred to, there was only the very thinnest coating of red stucco. The backing was often chiefly composed of clay, but the finish was usually excellent, gypsum being readily obtainable: some plaster shows a surface almost like that of marble. The finishing of plaster to woodwork was the opposite of the present method, the plaster being splayed back to afford a hold for the wood.¶ Plaster ceilings seem to have been the rule and not the exception at Knossos. Plaster was used externally as well as internally, the finishing coat being often, in such cases, coloured a light bluish grey.** The use of plaster for pavements was quite normal; when it was applied over flagstones, it was usually somewhat coarse, but when the base consisted of pozzolanic cement a fine kind was employed. Brick clay was much used especially in L.M. times as a facing, more particularly externally, but was greatly inferior to the plaster work of earlier date. Even in the case of ashlar masonry the walls were often covered with brick, earth or plaster.

(b) SUPPORTS.

Owing to the frequency of colonnades between room and room, which, as has already been seen, arises largely from climatic conditions, the supports, whether they be piers or columns, assume an importance far greater than they have in the mainland type of plan; they go far to make or mar the appearance of the interiors, and in addition are largely responsible for carrying the upper walls. The rectangular pier is of frequent occurrence, and usually has a square base: it seems to have been some-

* Evans in *B.S.A.*, XI.

† Evans in *B.S.A.*, VIII.

‡ Evans in *B.S.A.*, X.

§ Evans in *B.S.A.*, IX.

|| Evans in *B.S.A.*, VIII.

¶ Fyfe, *Journal R.I.B.A.*, 1902.

** Mrs. Hawes in *Gournia*.

what earlier in date than the column. At Gournia, for instance, the supports in the earlier part of the town period were always rectangular piers,* while in Re-occupation times rectangular and circular forms occur side by side, the latter ultimately ousting the former altogether. The north portico, Knossos, is another example of this, belonging to the earliest remains of the palace and having square piers of gypsum, while in the Early Minoan basement† there are two square monolithic piers of limestone, which rest on a broad base of the same stone. This monolithic character is also characteristic of early work.‡ The recessing of many of these piers to take the doors with which the openings between them were fitted will be alluded to later. An interesting feature is found in magazines 7 and 9, where two piers of good limestone masonry were added after the walls were built, evidently to take the pillars of a reconstructed upper hall.

In determining the nature of the columns used by the Minoans, the Frescoes are of the greatest use, giving us paintings of a feature of which no examples have been found. The Temple Fresco gives us a miniature representation of what is almost certainly the front of a shrine or sanctuary of wood with painted wooden columns. The base of the building appears to have been of stone, and the same material was apparently used in the entablature. Fig. 22 shows three examples of this Order.§ In every case the taper of the column is reversed from what was the invariable rule in Classic times. Type I. is reminiscent of the Doric Order in that it has no base. The cap of this column is very similar to an inverted Attic base. The caps of II. and III. are most like what is regarded as the typical Mycenaean cap, as shown in the Treasury of Atreus (remains of columns now in the British Museum). Even with the limited knowledge of this feature that we possess, enough has been discovered to enable us to assert at least tentatively that Type III. is the most distinctively Minoan of these forms. Luckily, however, since Sir Arthur Evans carried out his 1905 excavations, we have not been entirely dependent on representations for our knowledge of the Order employed.

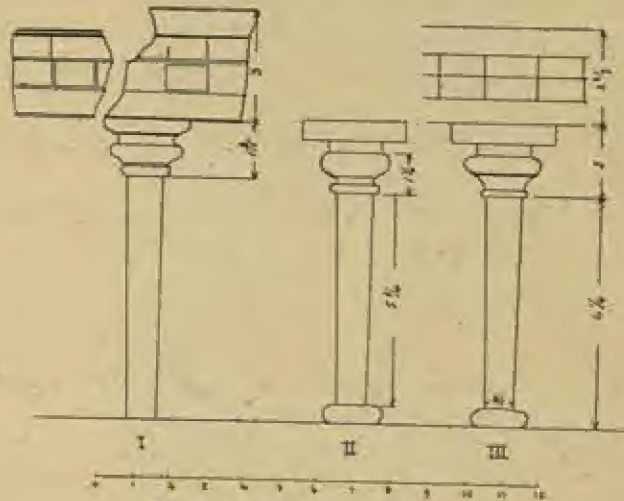


Fig. 22. The Minoan Order.

During the period of re-occupation (he writes, speaking of the House of the Fetish Shrine) the openings between three of the wooden columns which had originally stood on the round stone bases of the balustrade on the side facing the small corridor had been blocked and half of their diameter had been embedded in a clay and rubble walling, which must effectually have shut out the light from the passage way. So it comes about that, when later the wooden shafts themselves were destroyed by fire, they left in the plaster of the wall behind them almost perfect casts of their embedded halves.

The discovery of the actual charred remains of these and other columns which have been discovered on the spots they originally occupied, has disposed once and for all of the theories of an original stone type for the orders.

Columns were sometimes fluted,¶ both the concave and convex forms being used. It is significant that in the House of the Fetish Shrine the columns were found to have had 20 flutes, the same number as the Greek Doric usually possessed. Though no actual structural columns remain to us, there are a number of pedestals of lamps, &c., of stone in the form of columns still remaining. A very fine one** was discovered in 1900. It is of purple gypsum, quatrefoil in section, decorated with lotus and papyrus.

* Mrs. Hawes in *Gournia*.

† Evans in *B.S.A.*, IX.

‡ *Ibid.*

§ Fyfe, *Journal R.I.B.A.*, 1902.

¶ *B.S.A.*, XI.

** Evans in *B.S.A.*, XI.

** Evans in *B.S.A.*, XI.

A portion of another, finely carved, was found in the South-East House and is illustrated in B.S.A. IX.

The Grand Staircase at Knossos still shows the sockets which took the wooden columns (Fig. 11), while in the hall of the Royal Villa there are two column bases, of a stone resembling granite, resting on a limestone stylobate. In many cases these bases still show the original dowel holes.

The question of the Order is a most fascinating one and would well repay exhaustive and critical study, and it is surely not too much to hope that fresh finds may throw light on other features in the Doric Order which have as yet been unaffected by Cretan discoveries.

(c) OPENINGS.

There seems to have been fashion in door openings as in many other things, and at one time narrow and at another wide openings seem to have been the rule: a most interesting example of the changes passed through is afforded by the case of the magazines at Knossos, where wide gave way to narrow and was in its turn again superseded by the wide opening. Contemporary with this last change seems to have been the covering of many of the cists with paving* and the reduction of others to half their former depth. The openings were undoubtedly fitted in very many cases with doors,† and it is probable that in some cases at least they had wooden door frames within the jamb reveals. It seems to have been an almost invariable rule that where a single door was used there should be only one reveal, two reveals going with double doors. The doors were kept closed by means of bolts which shot into holes in the thresholds, and were always controlled from the side towards which they opened. When open they folded back against the piers and formed an integral part of them.

The jambs were constructed variously. In the more pretentious buildings these were often of carefully finished ashlar, but in the ordinary private houses brick clay covered with plaster ‡ seems to have been the most usual construction, while wood or rubble faced with plaster was sometimes used. In the house shown in Fig. 5 the back door had a frame consisting of three large stones. Internal as well as external doorways were often constructed with stone sills and stone jamb bases.§

The window openings seem to have been fitted with wooden frames of quite modern form. In the palace at Knossos window openings in many cases still show the dowel holes for fixing these frames.|| Of the greatest possible interest in this connection are the actual remains of the framework of a large double window ¶ in the room of the Plaster Couch. In some of the faience plaques the upper openings extend down to the floor and seem to represent windows opening on to balconies, such as appear in some of the miniature frescoes with groups of ladies at them.

(d) STAIRCASES.

Crete stands alone in the remains she has given us of staircases. Nowhere have we anything approaching what is left to us in the Royal Villa, or in many smaller houses; while the Grand Staircase, which has been referred to so many times already, absolutely stands in a place by itself. There were doubtless many ladders and staircases of wood used in the less important buildings** and even in the palaces in unimportant positions, leading down to cellars, for service staircases, &c., as the one at Knossos adjoining the hall of the colonnades. The remains of these, other than a few charred fragments, have however disappeared, those staircases which still remain in whole or part being all of stone. Speaking, as in this section, from a constructional point of view, it is quite unnecessary to say much about them. Their construction was of a simple straightforward character, much as would be employed in a similar situation by a good builder of to-day. The stairs were either of gypsum or limestone; sometimes both were used in combination, as at the Royal Villa, Knossos.††

* Evans in B.S.A., X.

† Evans in B.S.A., IX.

‡ Mrs. Hawes in *Gournia*.

§ *Ibid.*

|| Evans in B.S.A., VIII.

¶ *Ibid.*

** Many examples in *Gournia* and in B.S.A.

†† Evans in B.S.A., IX.

Where stairs were carried above a hollow space it is interesting to note that the landing blocks had ledges cut on them to give support to the lower steps of the ascending flight.* Where a central staircase wall was of rubble, it invariably had the large grooved gypsum blocks already referred to, to keep the rubble work securely in position. In some cases double-headed staircases were employed, of which one remains at the Royal Villa (Fig. 17), but this did not involve any material complication of the constructional problems. Columns were sometimes employed in conjunction with the staircase wall, as at Knossos (Fig. 23).

(e) FLOOR AND ROOF.

The methods of dealing with the floors varied from the very simplest to the most elaborate. In some cases the floor would be nothing more than the natural ground, beaten down to a hard and fairly flat surface, in others it might consist of plaster, or stone. Upper floors were often constructed of stone. Where the floors were covered with cement it was usually composed of sand and powdered potsherds, or limestone and small pebbles, mixed with a cement-like material, probably some form of lime.† This cement was usually laid on a foundation. In the Royal Villa this consisted of small pieces of limestone and gypsum slabs.‡ In one of the magazines opened up on the road to the House of the Fetish Shrine this foundation was evidently very carefully formed. It consisted first of a layer of tough grey earth, then a layer of potter's red earth, and over this was laid the layer of fine stucco cement, with a mixture of very small pebbles, the whole being finished to a fine surface.§

In the house at Gournia (Fig. 5) the floor of the court is paved with small boulder stones, while the courtyard of the palace was paved with concrete compounded of small pebbles, unburnt gypsum powdered up, and Santoria earth (pozzolana).|| In the South-West House there is a pavement of dark grey ironstone,¶ while in the megaron in the same building the floor is of terra-cotta-coloured stamped clay. Flooring of large gypsum slabs was sometimes used, as in the central hall of the Royal Villa, where a good sized central slab is surrounded by a slab border, and this border by another similar one.** The intervals between the borders were filled in with plaster or cement, which was coloured red and suggests that the whole space may have been coloured. Limestone slabs were also frequently used, as in the Theatral Area at Knossos: in this particular instance the slabs were probably covered with plaster.

The stone cists or kasselles (Fig. 9) form an interesting feature for study. Rows of these were found under the long gallery and in the floors of the magazines. They served in some cases undoubtedly largely as storage places for oil, &c., while in others they may have been used as safes for valuables. Their sides were formed of stone slabs of gypsum or limestone, the slab in the former case being rebated



Fig. 23.

Knossos. Upper Portion of one of the Staircases.
By permission of the Hellenic Society.

* Evans in *B.S.A.*, VIII.

† Dr. Mackenzie in *B.S.A.*, XI.

‡ Evans in *B.S.A.*, IX.

§ Evans in *B.S.A.*, X.

|| Mrs. Hawes in *Gournia*.

¶ Evans in *B.S.A.*, IX.

** *Ibid.*

into the bottom slab. Between the slab and the masonry retaining walls, a space was left, and filled in with red earth which seems to have been used for keeping off the damp. In rare cases a wood backing was used. They were in most case lined with lead, and seem to have been covered with wooden lids.

The stone repositories of the Central Palace area are especially interesting. They are some 6 feet by 4 feet 6 ins. by 5 feet deep—though varying a little in size. The Eastern Repository was built of solid blocks of limestone in three courses, the lowermost resting on a single slab forming the bottom: the dowel holes still existing suggest an original wooden framework. The Western Repository was not so massive in construction: its sides, which were dovetailed together,* were formed of grey limestone, and behind these slabs there was a rubble backing.

A house at Palaikastro† has furnished important evidence with regard to the method of roofing the ordinary town house. By great good fortune—for us—the house was destroyed by fire, and the heat baked and preserved some of the clay of which the roof was composed. The foundation of the ceiling was reeds, upon which was placed the first layer of clay: the second layer, which had sea-weed incorporated with it to render it more watertight, was laid upon this foundation. It says much for the conservative instinct which seems to be ingrained in men that this method is still in use in Crete to-day for native building. In the pillar room of the Royal Villa, just opposite the top of the pillar, an opening was left for a large square beam, which evidently rested on the pillar and was the principal support of the roof. A little higher than this the top course of the west wall has some holes of a semi-circular shape to receive the cross beams. The timber used was evidently very massive, the main beam being 80 centimetres by 60; cross beams, 44 centimetres diameter. Little as we know of the roof, compared with other parts of the building, we must feel thankful that any remains at all of this feature have been preserved to us.

VIII.—SANITATION.

If one were asked, out of the many remarkable things which have been discovered in connection with Minoan architecture, to pick one that was more striking than any other, the choice would probably fall upon the drainage system. One is used to finely proportioned buildings, beautiful sculpture, rich tapestries, and wonderfully illuminated books; to triumphs of engineering skill or marvels of minute workmanship, which have been left to us as a heritage from widely differing peoples and from widely differing times; but any scientific system of sanitation is unknown, whether we consider Egypt, Hellenic Greece, or Mediæval England. Yet when one turns to Crete a highly developed system of drainage is discovered which stands unrivalled, except by modern sanitation, and to which—except in the case of pre-Sargonic Babylon‡—there is no approach in ancient times.

The most complete sanitary system yet discovered is that of the Palace at Knossos, and it is consequently chiefly to this that attention will be directed. The system consists of a main drain or sewer with branches entering it at various points, and with cleaning eyes, inspection chambers, &c., much as in a modern drainage system. Stone shafts were run up to take the discharge from fittings on the upper floors and also the rainwater from the roof; and these acted at the same time as ventilators to the whole system.§ The terra-cotta drain pipes|| (Fig. 24) were circular in section, some 70 centimetres (2½ feet) long, and tapered from a diameter of 15·3 centimetres (about 6 inches) to 9·3 centimetres (less than 4 inches); they fitted one into another, the cracking of one pipe by the next one being forced into it being prevented by means of a stop ridge round the outside of the narrow end, which fitted against a raised collar on the butt of the next pipe; the joint was made in most approved style in cement. Pipes of this form have been found at Phaestos and by Dörpfeld, outside Crete, at Leukas. Some pipes of a similar form but without the stop ridge have also been discovered.

* Evans in *B.S.A.*, IX.

† R. M. Dawkins in *B.S.A.*, X.

‡ Burrows' *Discoveries*, ch. I.

§ Evans in *B.S.A.*, VIII.

|| *Ibid.*



Fig. 24. Drain Pipe from Knossos.



Fig. 27. Terra-cotta Bath.
By permission of the Hellenic Society.

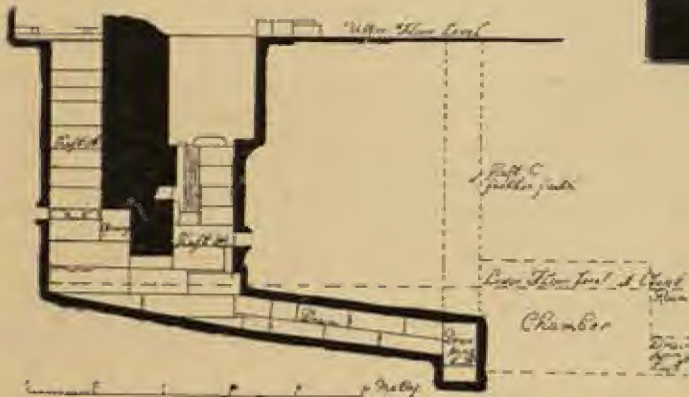


Fig. 25. Knossos: Section of Drains in Domestic Quarters.

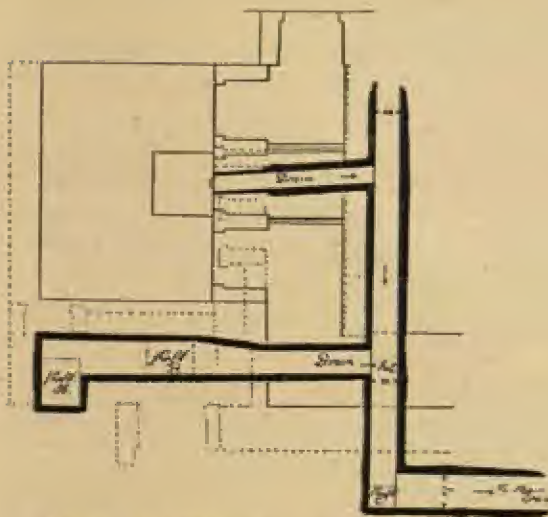


Fig. 26. Knossos: Plan of portion of Drainage in Domestic Quarters.

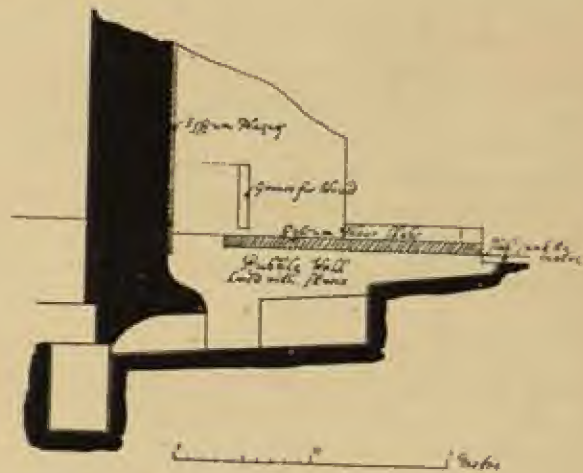


Fig. 28. Knossos: Water Closet.

The main drains, which are rectangular in section (Fig. 25), were of limestone slabs rendered inside: they were often of such a size that a man could easily pass along them. No care seems to have been taken to secure an easy bend in the drain (see turn at manhole, c, Fig. 26), but the flow of sewage was assisted by a good fall on the drains, and even an absolute drop appears at intervals. Manholes were provided where necessary, as in Figs. 25 and 26, which represent the drainage of a small portion of the domestic quarter of the Palace at Knossos. Various branches exist, leading from what may have been latrines, sinks, baths, &c., indeed one of the latter still exists (see Fig. 27); but undoubtedly the most interesting object in the whole of the sanitary remains is the w.c. opening off the room of the Plaster Couch (Fig. 28). The floor and partition walls of this apartment consisted of gypsum slabs: a groove still remaining in one of these slabs shows where the seat riser must have been housed into the partition. Immediately under the seat will be seen, by reference to the diagram, a curiously curved projection which was originally rendered in cement and which doubtless had a counterbalance flap in conjunction with it, to keep the evil smells from the drain with which the cavity was connected from entering the house. The apparatus was probably flushed down after use by means of a jug or other water vessel which stood at one side of the seat,* this being the most likely reason for the drain not being placed centrally in the compartment, but to one side. The whole system could be flushed down periodically, quite independently of the cleanliness or otherwise of the users, by means of a hole scooped out of the stone slab outside the door, which communicated by means of a space under the floor direct with the drain. This hole, it may be mentioned, was closed by means of a stone slab when not actually being used.

The drains, it must be remembered, were periodically and frequently flushed with great force during the wet season by the torrential rains, and indeed one of the main objects of the system† was to afford a rapid means of escape for this surface water, and everything was done to assist this object. Mention has already been made of the shafts to carry off water from the roofs. The light wells were not paved with slabs as the living rooms so often were, but were floored with an exceedingly hard, impenetrable concrete.‡ This concrete flooring was continued over any portion of the building adjacent to the light well where rain was likely to beat in, as the vestibule at Phaestos. These floors had a fall to a definite point where a sink was placed—there is one in the light well of the Hall of the Double Axes partially preserved—while, to prevent wet soaking down to the foundations, the concrete was bevelled up at the point of its junction with the wall. It was the invariable practice to build all light wells in finely jointed ashlar limestone.

Street drainage was also attended to, gutters or channels being provided to carry off the water, as may be seen at Palaikastro § (Fig. 18). That hydraulic science was understood by the Minoans is shown by a stream of water which is conducted down beside the staircase by the Eastern Bastion. A stone channel is carried ¶ down in a series of parabolic curves which retard the flow of the water, which is further retarded as it approaches a sharp turn at the bottom of the flight by deepening the channel and drawing the water away from possible point of overflow by the sudden downward slope of the channel. A small catch-pit for sediment was formed in the level portion of the runnel along the terrace, and the depositing of any sediment was further assisted by a double bend in the channel on either side of this little basin. Similar runnels have been discovered elsewhere, as the Theatral Area, Knossos. Truly, Crete might furnish lessons to many modern so-called sanitarians and hydraulic engineers.

IX.—DECORATION.

(a) ARCHITECTURAL. ¶

Even in a century and a half the pictures of Reynolds have become cracked and faded with age, and give one the impression that they cannot last out many more hundred years. What, then, can

* Evans in *B.S.A.*, VIII.

† *Ibid.*

‡ Mackenzie in *B.S.A.*, XI.

§ R. M. Dawkins in *B.S.A.*, XI.

¶ Evans in *B.S.A.*, VIII.

¶ For the greater portion of the matter in this section the author is indebted to Mr. Fyfe's excellent Paper in *Journal R.I.B.A.*, 1902.

reasonably be expected to remain of paintings executed some three and a half millenniums ago? Yet, great as is the space of time which has elapsed since they were carried out, there still exist to-day numerous remains of coloured decoration which seem to have lost hardly any of their original freshness and life, and which endure with a new meaning such passages from Homer as :—

For, lo! the walls of the chambers and the panels fashioned fair,
And the rafters of the pine tree and the shafts that all uprear
All shine unto mine eyesight, as if with fire ablaze.*

It must have been sober fact and no mere poetic licence when the walls were said to be as if with fire ablaze. Indeed, it is a great question whether modern buildings can show anything to compare with those wonderful prehistoric wall decorations which, as much as anything, show us to what a high artistic standard these people must have attained.

To turn first to the subject of the exterior. The buildings, according to the frescoes, were coloured externally, and though this colouring, as often found in fresco work, may be to a certain extent conventional, there is probably some sort of substratum of actuality underlying it; but as we have so little external colour remains, this part of the subject must remain more or less a matter of conjecture. Of the interior decoration we have considerable remains: one of the most valuable frescoes, from the point of view of gaining knowledge of Minoan decoration and construction, being the "Temple" Fresco, which shows a templefront with columns and various decorative motives. As might be expected, the earlier the date of the work, the simpler, as a rule, is the colour scheme employed. The permanence of the colours used is remarkable, and the colours seem absolutely to be bound into the plaster, having probably been applied while the finishing coat was still wet.

Roughly, half the height of the room would in most cases be occupied by the dado, this dado often, in the more important rooms almost invariably, being of gypsum slabs. The wall in some cases had a projecting base course. Where the plastering was continued down to the floor the lower portion was sometimes painted to imitate marble. Above the dado came a well-defined band which marked the top of doors and windows and in which appeared the ends of the cross beams which have been already mentioned. Next was a broad band of plaster work which formed the favourite position for picture frescoes; and a frieze finished the scheme. There were, of course, many variations of this basic arrangement, such as a double frieze or the substitution of a skirting for the dado. It was the Minoan practice to finish the whole of the plaster in colour, and it has even been suggested that the dado slabs and stone seats were also coloured.† The usual colour of plain painted plaster seems to have been a dark red in the more pretentious buildings, and a very light bluish grey in the houses of the ordinary citizens.‡ Where colours were used in combination, the scheme was usually red with yellow, and blue with black. There was a tendency in some cases to emphasise the vertical constructive line in the decorative scheme, as may be seen in the jambs of some door openings.

A number of plaster fragments have enabled a conjectural restoration of the ceiling decoration to be made, and this has been done in a brilliant manner by Mr. Fyfe.§ The scheme as he has reconstructed it consists of spirals in combination with small rosettes, with quatrefoils at intervals of just over 2 feet centre to centre. Moulded work, both in plaster and stone, seems at one time to have had an important part in the decorative scheme. Fig. 29 B is but one example,

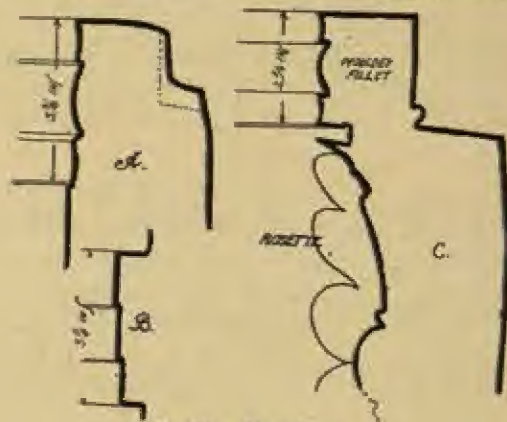


Fig. 29. Mouldings.

* *Odyssey*, XIX. 36.

† Fyfe, *Journal R.I.B.A.*, 1902; Evans in *B.S.A.*, VII.

‡ Hawes' *Crete*.

§ *Journal R.I.B.A.*, 1902.

and shows the remains of an architrave or frieze from Knossos. The mouldings which surrounded frescoes, and helped to divide the wall into compartments, were almost invariably of simple character; but many of the larger and more important mouldings were much more elaborate in section; of these, two typical forms are shown in Fig. 29 (A and B). A sort of moulded relief was also employed in the frescoes themselves, but this modelling was only an auxiliary to the painting, rather than, as in Classical and Mediæval times, the other way about.

In Minoan decoration several motives constantly recur, the chief of these being the triglyph, the rosette, and the spiral. The triglyph motive, so called from its having been considered to be the prototype of the Doric triglyph,* has been discovered not only in Crete, but at Mycenæ,† Tiryns,‡ and Menidi in Attica.§ The usual form of this motive is rectangular—the long axis being horizontal—divided by a vertical member in the centre, the spaces resulting from this division being filled in with half ellipses of ornament. It is significant that this motive, which is eminently constructional, was originally used in places framed for strength.

The rosette, another typical ornament, occurs usually at regular horizontal intervals, and was doubtless suggested by the exposed beam ends which have been mentioned in speaking of construction.



Fig. 30. Two forms of Rosette.

It is also used in conjunction with the spiral motive. These rosettes were frequently carved in stone: an example of this can be seen at Knossos in the remains of the Propylæum overlooking the Southern Terrace, where they are undercut and executed in a porphyry-like limestone, and form part of a frieze or cornice.|| Fyfe distinguishes between two forms of rosette: the "flower," with two series of petals and with distinctly rounded outer edges, and the "beam end," which keeps a more unbroken

circular form and has only a suggestion of radial lines. (See Figs. 30 A and B.)

The most important of all the decorative features is the spiral, which is treated in a variety of ways. It is used as a running frieze, as a subordinate motive in borders, and also as a surface pattern: its use in the latter connection has already been mentioned in speaking of ceiling decoration. The central eye in these spirals almost always produces two or three, and in some cases four, outlets.

Various smaller forms of ornament also exist, as the dentil, the fish-scale, and the lozenge. The value of the horizontal line was keenly appreciated, and it occurs constantly in the decoration. Many of the motives that have been briefly touched upon occur also, with or without modification, in the decoration of the pottery of the period. The superb decoration of some of the bronze vessels that have been found is strongly architectural in character.

(b)—PICTORIAL.

Soul-soothing Art ! whom Morning, Noontide, Even,
Do serve with all their changeful pageantry ;
Thou, with ambition modest yet sublime,
Here, for the sight of mortal men, has given
To one brief moment caught from fleeting time
The appropriate calm of blest eternity.*

The art of painting was brought among the Minoans to a high state of perfection—a perfection which in many points has never been surpassed by later workers, and which must ever be a lasting rebuke to those who imagine that within the compass of a few hundred years man has achieved everything that is really worthy of endurance in painting.

The number of fragments that have come down to us show that frescoes formed an exceedingly

* Evans, *Mycenæan Tree and Pillar Cult.*

† Perrot and Chipiez, *Histoire de l'Art.*

‡ Dörpfeld in Schliemann's *Tiryns.*

§ *Ibid.*

|| Evans in *Journal R.I.B.A.*, 1902.

¶ Wordsworth, *Miscellaneous Sonnets*, IX.

important part of the coloured decoration of the more important buildings. The great halls and corridors must have presented a perfect panorama of scenes from Cretan life. The usual position occupied by these frescoes has already been indicated. There are but few fragments remaining of First Middle Minoan fresco work; what does exist is of formal character and vivid colour. Undoubtedly the finest work of the Minoan artists was executed in M.M. III. Unfortunately almost acres of frescoes must have been destroyed when the later remodellings took place, so the remains we have are somewhat scanty. Yet, small as they are, they are of incalculable value, for they are fragments of surpassing beauty and charm, with all that freshness and spontaneity and grace which always characterises the best work of the best period. There is none of that ostentation which is observable in later work; these frescoes do not seem to be seeking admiration or even notice—those who would appreciate them must seek them out, give some time to them, study them. The admiration of the unthinking and the indiscriminating, which is always given to the work that shouts the loudest, has no value for them: they would rather it passed them by.

The crocus-gatherer of Knossos and the pheasant hunting cat of Haghia Triadha are perhaps the most noteworthy examples of the period remaining to us. The former shows a blue boy gathering white crocuses and arranging them in a vase—

Thou seemest to my fancy, singing here
And gathering flowers, as that fair maiden when
She lost the Spring, and Ceres her more dear;*

the latter a great brown cat watching a pheasant and gathering itself for the spring. The charm and beauty, the true art, displayed in these works would be hard to beat in the work of ages which consider themselves more enlightened.

The frescoes of the Palace Period are, as has been tacitly implied, of a more grandiose and superficial character than the earlier work. Yet in saying this it must not be thought for a moment that this later period did not produce noteworthy work, for there are still remaining many examples showing a masterly handling of subject and a true grasp of the conditions to be complied with. What is meant to be implied is that the spontaneity and naturalness seem to be in large measure lost: there seems more conscious striving after effect, more display of dexterity in workmanship, with an eye all the time as to its effect on the gallery.

Undoubtedly the best known work of this period is the Cup-Bearer, a fresco which was discovered in one of the south-west corridors of the Palace at Knossos. It shows a youth of swarthy skin and black hair, carrying in front of him a long funnel-shaped vase. He wears a loin-cloth of bright colour, and gold bands or bracelets on his arms. In spite of obvious defects of drawing this work is a real creation of genius. Sir Arthur Evans has described it † as "the finest example of figure painting that has survived from prehistoric Greece." Only the lower portion of by far the larger part of the fresco of which this figure was a part—the Processional Fresco—is preserved to us.

Another most interesting fresco is that of the Throne Room. This shows wingless griffins with peacock plumes, backed by a landscape which is somewhat reminiscent of Egypt: perhaps Egyptian influences had swayed its designer, perhaps—though this is a mere idle fancy—this room was used fairly often by ambassadors from Egypt, and the Cretan artist had a commendable desire to make them feel more at home.

Of very different style from those already described is the Toreador Fresco, which shows a boy and two girls performing with bulls. In this work the most violent actions are portrayed, and, as has been remarked, ‡ "The artist's temerity in attempting such a composition equals the desperate daring of the performers."

A most interesting suggestion § is the one that in certain cases a sort of pictorial illusion was

* Dante, *Purgatorio*, XXVIII. (Shelley's Translation).

† *Journal R.I.B.A.*, 1902.

‡ Hawes, *Crete*, ch. ix.

§ Evans in *Journal R.I.B.A.*, 1902.

resorted to, such as is found in some Italian villas; light wells, &c., being treated with landscapes in such a manner as to convey the idea—to a person of brilliant imagination—of a distant view.

No attempt has been made to deal with the most fascinating subject of frescoes with any approach to completeness, many well-known examples have not even been mentioned, but enough has been said to indicate the importance of these remains and their position in the architectural scheme of the buildings.

X.—FIXTURES AND FURNISHING.

In speaking of the furnishing of Minoan houses one has to rid one's mind altogether of any idea of the modern complexity of luxury. It has been well said * that the Westerner when he tries to imitate the East in the matter of furnishings arrives at the opposite pole from Eastern simplicity, and crowds into one room what the Oriental would have in twenty. Doubtless to the eyes of the Westerner the Minoan interiors would have appeared somewhat bare; even as the interior of an Eastern dwelling of the present day does. Chairs and tables of wood, though they may have existed, have all disappeared, as have also the hangings, rugs, and skins with which the rooms must have been provided. The most famous seat remaining is the gypsum throne (Fig. 13), which was found in the room bearing its name at Knossos. This, which according to Sir Arthur Evans is a model of an earlier wooden one, is, as can be seen from the photo, extremely Gothic in design, the adornment of the arches on the front of the base, with bud-like crockets, being particularly noteworthy. The whole thing is undoubtedly a remarkable piece of work.

We have a number of seats of the structural type still remaining. One of these (Fig. 31) occurs on the raised stylobate forming the division between the two portions of the megaron at Knossos. It

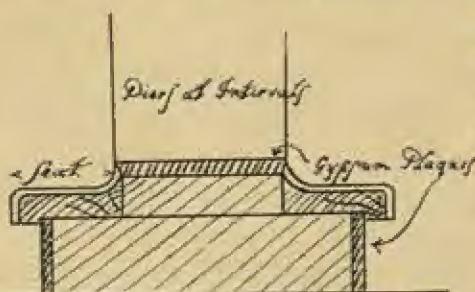


Fig. 31. Knossos: Seat in Queen's Megaron.

was formed of limestone blocks faced with gypsum slabs. Along its centre ran a raised ledge of varied composition, stone, rubble, and plaster, on which were placed gypsum slabs. On the lower portions were put boards resting on the slabs, and these were coated with cement, the surface of which was rounded up against the edge of the centre slabs, forming a most comfortable seat.

Both the Throne Room (Fig. 13) and the Room of the Stone Bench have yielded good examples of stone benches, with pilasters in the front. The megaron of the South-East House also shows low benches on three of its sides,

with tops of gypsum laid on a bed of terra-cotta-covered clay. Seats were often arranged externally at the base of a wall, as on the west wall at Knossos (Fig. 8) or in the Court of the Distaffs, while at Palaikastro † there are porches with recesses for benches still remaining.

Low platforms which may have been covered directly with rugs, &c., or may have served to support beds or couches, are found in some of the rooms of the domestic quarters of the palaces, and in the houses. One, of plaster-covered stonework, occurs in the room of the Plaster Couch at Knossos.

Of cupboards and shelves some few examples have been found. In the Pillar Room of the South-East House ‡ there is a well-defined niche which it is almost certain served the purpose of a cupboard, while in the Palace, underneath the wooden stair which led from the Hall of the Colonnades, was a small stone closet, in which part of the treasures kept in the neighbouring inner room had been hurriedly deposited just before the destruction of the Palace.§

In the house at Gournia round room x on plan (Fig. 5) there was a platform of flags 35 centi.

* Hawes, *Crete*, ch. ii.
† Bosanquet in *B.S.A.*, VIII.

‡ Evans in *B.S.A.*, IX.
§ *Ibid.*

metres wide and 6 to 10 centimetres high, to take oil jars and other domestic utensils, while in the house *ε* d, the south room had a wooden shelf 35 centimetres above the floor.

The great chest of Cyprus wood,* in whose top and sides were set the faience plaques which have been of such value in giving us the elevation of the small Minoan house, must not be passed over without mention. It must have been a truly magnificent piece of work with its massive frame-work and pictures representing town and country life. Sir Arthur Evans says we are nearer here than we have ever been before to the shield of Achilles.†

The wonderful Draught Board which Sir Arthur Evans found at Knossos must also be mentioned. It is a most elaborate construction of gold, silver, ivory, and crystal, and is in every way a triumph of workmanship. Amongst the interesting objects which have come down to us, and which fall within the category of "furnishing," are the lamps and pedestals, which were made in the shape of columns and were of clay or stone. In the Pillar Room of the South-East House was found the purple gypsum shaft of one of these pedestals, ornamented with spiral bands of decorative relief of rich design. Circular tables and lamps were also turned out by the potter and stone carver in great numbers.

We can imagine the picturesque scenes in the *magaron* of the palaces when the larger lamps were alight—the great bowls of oil with three or four wicks, on tall standards—sending a fitful glare through the columned chambers, and lighting up the gaily coloured costumes of lords and ladies, listening to sea-tales or adventures of the bull-chase.‡

Pots, kettles, ladles, weights and measures, and many other articles of domestic use, have been found in great numbers, and would be an indication if nothing else remained that their users belonged to a civilised people.

XI.—ARTS AND CRAFTS.

(a)—POTTERY.

Exigencies of time and space will compel a very hurried survey of Minoan Arts and Crafts.

To speak first of Pottery. This is a subject whose interest and importance would make one wish to devote a larger space to its consideration, if only because of its extreme importance as an index of date. In Neolithic times pots were made and polished by hand; they were sometimes decorated—if the term can be allowed—by very rudimentary incisions and rippling, followed a little later by the practice of filling the incisions with chalk. The introduction of the wheel and of the oven, marked a great step forward in the potter's art. Soon after their introduction came the first painting of the clay, and this was done in two ways: first by completely covering the vase with a black paint and drawing on this in white, orange, and red, and second by painting on the buff clay itself. These two methods, it has to be constantly borne in mind, developed side by side; the latter gave a freer form of design than the former, the reason being that the pigments used in the light-on-dark decoration were chalky,§ and consequently could not be applied boldly. Vases were often carved in stone, and were frequently worked as fine as some of our china. One found at Knossos, over 2 feet high, had three handles, and was ornamented with bosses and inlays of metal.

There was a gradual awakening to naturalism amongst the potters in the beginning of Middle Minoan times, such things as the wave and other natural lines attracting them. To this period belong the famous "Kamares" || ware with its beauty of design and its graceful colouring: black, purple, white, cream, brown, &c., having been freely used. The fruit-stand from Palaikastro ¶ is but one example of the style. Towards the close of the period naturalistic designs began to make their appearance, and, as the Polychrome style declined, this naturalistic school came to the front. The designs they produced are full of charm and beauty. The gladiolus, crocus, lily and iris, were the favourite flowers, and the craftsmen showed true artistic insight in their choice of these splendidly

* Evans in *B.S.A.*, VIII.

† *Iliad*, XVIII.

‡ Hawes, *Crete*, ch. ii.

§ Hogarth and Welch in *J.H.S.*, XXI.

|| See Evans in *B.S.A.*, VIII.; Hogarth and Welch in *J.H.S.*, XXI.; and Mackenzie *ibid.* XXIII.

¶ R. M. Dawkins in *B.S.A.*, IX.

decorative flowers. A charming example of this style is the "Vase with Lily Design," found in the south-east magazines at Knossos, and illustrated in *B.S.A.* X. It is to this date, too, that the well-known pithoi belong, with their characteristic form and decoration (Fig. 9).

In the First Late Period there was an increasing tendency towards formality, leading gradually to what has been termed the architectonic style,* the well-known Palace Period. To late Minoan times belong the splendid Boxer and Harvester vases from Haghia Triadha,† the former being a funnel-shaped vase divided into four zones and ornamented with scenes from "the ring," the latter a masterly work showing a procession of harvesters. In addition to clay and stone, bronze was also employed, and in many cases with singular success. It has to be remembered in studying the pottery that, though no mention of them has been made, there were thousands of plain pieces of pottery turned out by the craftsman for the use of the ordinary citizen.

(b)—THE LESSER ARTS.

The Minoans seem to have been equally successful in every department of Art. Not only could they appreciate scale and balance in the erection of buildings, or achieve brilliant results in the province of fresco painting, but they seem to have been equally at home in the lesser arts. The carving of seal stones and gems was a branch of the subject which was brought to great perfection, and numerous examples have come down to us. At Zakro, in one house alone, one hundred and fifty different sealings from rings and gems were discovered.‡ All kinds of objects were laid under contribution to furnish subjects for the artist's skill. Grotesques were a favourite subject, and we have such representations as a bat's wings and human head,§ a man-stag,|| a man-goat ¶ and a sea-monster.** The best examples show great restraint and simplicity, as for example the dragon-flies on a green onyx, discovered in Gournia.†† Jewellery of pure gold has been discovered at Moklos,‡‡ pendants, chains, and necklaces being amongst the articles found.

Of free sculpture on a large scale no example has been found, but attached sculpture—such as the bulls' or lions' heads—still exist to show the skill of the artists in this relief work. Free sculpture in ivory of a small scale is still in some cases left to us. The youths engaged in bull fighting which have been discovered at Knossos show a mastery of material, an anatomical knowledge, and a daring of execution which is nothing short of marvellous.

Crete was famed in ancient times for skill in metal-working, and anyone who is able to examine some of the bronze vessels that have been brought to light will readily understand this. The bronze basin with its lily-bordered and beautiful handle, or the ewer with its bold repoussé work,§§ discovered at Knossos in 1908 by Sir Arthur Evans, must be amongst the most magnificent examples of bronze vessels in the world. A number of fine silver bowls have also been discovered; also "a votive offering of very elegant fern-like sprays of thin gold plate and wire."||| Inlaying was also practised, and fine needlework, hangings, &c., were worked; though, of course, no remains of these have come down to us. Truly the activities of the craftsman were almost as varied three or four millenniums ago as they are to-day.

XII.—OUR DEBT TO CRETE.

The question must inevitably be asked—What is the value of Minoan Architecture? What has been its effect upon the architecture of the modern world? What can we learn from this new-found past which is to be of practical value to us as men actually engaged in the design and erection of buildings?

The last part of the question has been very largely answered in the course of this essay, more particularly in the section dealing with the Palace plan. Sir Arthur Evans has raised the query ¶¶ as

* Hawes, *Crete*, ch. ix.

† Both illustrated in Burrows' *Recent Discoveries*.

‡ Hogarth in *B.S.A.*, VII.

§ Evans in *J.H.S.*, XXII.

|| Evans in *B.S.A.*, IX.

¶ *J.H.S.*, XXII.

** *B.S.A.*, IX.

†† Mrs. Williams in *Gournia*.

‡‡ Hawes, *Crete*, ch. ix.

§§ Evans in *B.S.A.*, IX.

||| Hawes, *Crete*, ch. ix.

¶¶ *Journal R.I.B.A.*, 1902.

to whether the modern architect commissioned to design a palatial residence for a South African millionaire might not be able to glean some hints from Knossos; and we may well carry the question a good deal further and ask whether such masterly pieces of planning as have been already referred to do not afford many object lessons useful to the architect of, let us say, a modern public building; or whether there might not sometimes be tried that more intimate relationship between room and room, of which the Minoan architects were such masters.

To turn to the other portion of the question—What has been its effects upon the architecture of the modern world? One has, in answering this question, to bear in mind the part that Greece is admitted by all scholars to have played in the making of modern Europe—more, in the making of the modern world as it now exists. Speaking broadly, and disregarding factors of lesser importance, modern civilisation may be said to be derived from two sources: on its moral and religious side it is the gift of Palestine, and on its intellectual side—art, literature, and to a large degree thought—it is the gift of classic Greece.

Admitting this, it must be apparent that the mother of classic Greece must be of the utmost possible importance to us to-day. And this mother is now admitted to have been Crete. "The connection between Minoan and Hellenic civilisation is vital, not one of locality alone, as is the tie between the prehistoric and the historic of America, but one of relationship. Egypt may have been foster-mother to classical Greece, but the mother, never forgotten by her child, was Crete." * Crete, only known for long years as the haunt of pirates and the home of insurrections, has now, through the witness of her remains, taken her proper place in the history of the world's civilisations, and the pirates of more modern days are forgotten in the knowledge of her wonderful past,

dwellings of a race of mightier men
And monuments of less ungentle creeds
Tell their own tale to him who wisely heeds
The language which they speak.†

We have found at last the foundations on which the great ones of classical times built, and as a consequence are able to understand the superstructure they raised upon these foundations better than we have ever done before. Knowing what they had to start with, the problems that had been solved and those that still waited for solution, the difficulties that were no longer difficulties because they had been resolved in earlier times, the conditions that were new to the later age and called for new solutions, we are able to appreciate more fully and with greater critical insight the genius of the Greek peoples and to understand points that may previously have been obscure. Every classical student, when this pre-Greek civilisation first came to light, must have had the feelings which Keats has so finely expressed:

Then felt I like some watcher of the skies
When a new planet swims into his ken;
Or like stout Cortez when, with eagle eyes,
He stared at the Pacific—all his men
Looked at each other with a wild surmise—
Silent, upon a peak in Darien.‡

As Sir Arthur Evans puts it: §

The recent discoveries in Crete have added a new horizon to European civilisation. A new standpoint has been at the same time obtained for surveying not only the Ancient Classical World of Greece and Rome, but the modern world in which we live. This revelation of the past has thus more than an archaeological interest. It concerns all history, and must affect the mental attitude of our own and future generations in many departments of knowledge.

We must never forget the essential unity of this Cretan civilisation, with all that comes after it. Its essential unity within itself it has been endeavoured to show in the course of this essay—in order to keep this unity well to the front the distinction between the different periods which is, of course, to a certain extent arbitrary, has not always been insisted upon—but its unity with historic Greece, Rome, and the Modern World, must also be kept in mind. It had its rise, course, and overthrow,

* Hawes, *Crete*: Introduction.

† Shelley, *Revolt of Islam*, Canto II. xi.

‡ *On First Looking into Chapman's Homer*.

§ Preface to Hawes' *Crete*.

but it rose again from the ashes of its past, in somewhat altered form in Hellenic days, and from thence its influence has spread until it has dominated the whole intellectual world and made all time its debtor.

And downward thence to latest days
The heritage of beauty fell;
And Grecian forms and Grecian lays
Prolonged their humanising spell.
Till when new worlds for man to win
The Atlantic riven waves disclose,
The wildernesses there begin
To blossom with the Grecian rose.]]

CHRONOLOGICAL TABLE.

This table is based on that of Mr. and Mrs. Hawes in *Crete, the Forerunner of Greece*. The Berlin or Minimum System of dating is adopted for the Egyptian Dynasties.

Date, B.C.	Crete.	Agean Area (Exo-Cretan).	Egypt.
c. 10000-3000	Stone Age (Neolithic): Settlement at Knossos Cave dwelling at Mima Rock shelter at Magasa House at Magasa	— — — —	— — — —
c. 3315	—	—	Dynasty I.
c. 3000-2800	Transition to bronze	—	—
c. 2800-2600	Early Minoan I.	—	Dynasty IV.: The Pyramids.
c. 2600-2400	Early Minoan II.: Settlements at Vasiliki and Mochlos ... Burials at Koumasa, Hagia Triadha, and Aghios Onuphrios.	Burials in Cyclades	—
c. 2540	—	—	Dynasty VI.
c. 2500	—	2nd City Hissarlik (Troy)	—
c. 2400-2200	Early Minoan III.: Pottery deposits at Gournia, Palaikastro, etc.	—	—
c. 2200-2100	Middle Minoan I.: Earlier palaces Knossos and Phaestos ...	—	—
c. 2160	—	—	Dynasty XI.
c. 2100-1900	Middle Minoan II.: First climax at Knossos and Phaestos "Kamars" ware. Earlier palace at Knossos destroyed ...	— — —	—
c. 2000	—	—	Dynasty XII.: Beginning of Temple of Ammon at Karnak. Tombs at Beni-Hassan.
c. 1900-1700	Middle Minoan III.: Later Palace at Knossos First Villa at Hagia Triadha Earliest houses at Gournia	— — —	Hyksos or shepherd kings.
c. 1700-1500	Late Minoan I.: Height of prosperity of smaller towns... 1st Palace Hagia Triadha Town period, Gournia Later Palace at Phaestos	2nd City Phylakopi	Dynasty XVII.
c. 1580	—	—	Dynasty XVIII.
c. 1500-1450	Late Minoan II. or Palace Period: Remodelling at Knossos Fall of Gournia, Zakro, and Palaikastro	Rise of Mycenae, Tiryns, etc. ...	Thothmes III.
c. 1450-1200	Late Minoan III.	—	—
c. 1450	Fall of Knossos	—	—
c. 1425-1350	Period of partial re-occupation	—	—
c. 1350-1210	Steady decline	Supremacy of mainland capitals ... 6th City at Hissarlik (Homeric Troy).	Temple of Abu-Simbel.
c. 1210-1200	Coming of the Northerners Final fall of Minoan civilisation Transition to Iron The Homeric Age	— — — —	Seti I.

REVIEWS.

WESTMINSTER HALL ROOF.

Westminster Hall. Report to the First Commissioner of H.M. Works, &c., on the Condition of the Roof Timbers of Westminster Hall, with Suggestions for Maintaining the Stability of the Roof, by Mr. F. Baines, M.V.O., one of the Principal Architects in H.M. Office of Works. (Cd. 7436, 1914) H.M. Stationery Office, London. Price 1s. 4d.

The building, the result of the grandiose schemes of two monarchs who met violent deaths ere they were scarcely completed, has been the subject of two official reports in the last thirty years. Pearson's dealt with the treatment of the hall after the removal of Soane's Courts of Justice. The present one faces a problem that is perhaps unique in the annals of architecture. The principle governing the problem, though it hardly needs emphasising with architects, arises from the realisation of the fact that the works of the past are and will be of vast interest and of great value to present and future generations. The affluence to which the nation has attained—how long to continue now, who knows?—renders possible the solution of the problem. The largest mediæval open-timber roof in Europe, covering an area of over 16,000 square feet, has been found to be in such a state of decay that parts are in danger of collapsing. The problem is to preserve *in situ* every scrap of the moulded and worked face of timbers which have been honeycombed chiefly by the larvæ of one of the Anobiid beetles, *Xestobium tessellatum*. The question divides itself into several parts; to extirpate the *Xestobium tessellatum* and the larvæ of other beetles and moths causing the principal decay, to prevent the re-occurrence of their attacks, to cut out the decayed parts and to piece up with new wood, and to prevent the roof from collapsing.

Appendix II. gives the results of a detailed examination of one of the trusses and one of the bays of the roof out of eight trusses and six bays similarly examined. From it may be gathered the inconceivable ravages caused by the larvæ. Various members have been hollowed out, the decay being worst at the junctions of the timbers with each other. The importance, therefore, of extirpating the larvæ needs no further explanation. Several conditions to be fulfilled by any liquid chosen for this purpose are laid down, fumigation not being considered practicable owing to the large space occupied by the roof. The liquid must (a) penetrate well into the timber by its mere application to the external surfaces; (b) not be inflammable; (c) not smell offensively; (d) not discolour the wood; (e) not be a volatile poison; (f) be a perfect insecticide; (g) be a good timber preservative. Of a number examined and reported upon two solutions stand out from the rest. The Government Analyst, while favouring, in spite of the difficulties, fumigation with sulphur dioxide, suggests camphor dissolved in this gas. Dr. Westergaard, on the other hand, believes in a solution of naphthaline in carbon tetrachloride. The result of their experiments and the Government Analyst's views on the merits of

various other solutions are given in Appendix I. The question as to the best solution will have to be settled finally by experts.

It is hoped that the re-occurrence of the attacks by the larvæ in the old timber may be prevented by the solution chosen. The new timber will probably be treated by a purified tar oil which the Government Analyst has obtained to his specification. This oil, curiously, does not seriously darken new oak, though it does the old. In addition it is proposed to ventilate the lower part of the roof by restoring the dormers which on the west side were removed by Pearson in 1885, and on the east two or three years later. It is not stated by what means the proposed ventilation of the upper part of the roof will be effected other than to the bay carrying the *flèche*. This will be replaced, possibly on the lines of the original, but in any case with provision for the maximum amount of ventilation.

The problem of piecing out the decayed timber with new raises the question—With what timber shall it be done? That the old timber is oak has been put beyond doubt by microscopic examination, confirmed by the results of the historical investigations made by the architectural staff of the Ancient Monuments Branch. A concise *résumé* of these results, written by the Chief Inspector, mentions that the oak came from the King's Park of Odiham, the Abbot of St. Alban's wood at Bernan, and a wood by Kingston-on-Thames. Besides the sources given in this *résumé* Monkenfrith is also mentioned in the mediæval accounts* as a place from which oak was brought. Kingston-on-Thames, while supplying some of the oak for the roof, provided Hugh Herland, at this time Richard II.'s chief carpenter, with another mark of royal favour other than those by which it is illustrated in the report. He was granted in 1397 "the croppings and coppices (*croppis* and *coppicia*) from the trees and timber bought and provided for the Hall which lie cut and remaining over in a wood near Kyngeston upon Thames."† The material which, but for the attacks of the larvæ, has withstood the decay of five centuries, and is as sound to-day as on the day it was erected, requires no other recommendation for its use in piecing up the decayed parts. The employment of other material, such as teak and foreign and colonial oak, with the present comparatively short experience of their qualities and behaviour is therefore rejected. The different species of English oak and their seasoning and conversion are next examined, and it is surprising how contradictory the views of recognised experts are on these matters. Mr. Baines, after weighing all these, has come to the conclusion that the new oak should fulfil the following conditions:—(a) The timber should be open grown oak in park situations, or grown as coppice and standard; (b) the soil in which the timber is grown should be known, and should be a stiff, retentive loam; (c) the species of oak should be

* E. R. Acc. nat. 471/11.

† Pat. 21 Richard II. m. 7. See also Foreign Roll, 31 F.

the pedunculata, sessile or durmast oak should not be used; (d) timber should be all winter-felled, and no spring or autumn felled oak should be used; (e) The timber should be at least two or three years fallen before conversion, and for great constructional purposes pieces of what is called the "prime log" only should be used, i.e. the butt end of the tree from the root to the first outthrow of a big branch; (f) if possible the oak should be seasoned for six months under cover, after being cut to the scantlings in which it is to be used.

Of the 40,000 cubic feet of timber in the roof it is estimated that about 35 to 40 per cent. will have to be replaced if the roof is merely patched where actual decay has taken place. If, however, it were proposed to render the roof self-supporting, as much as 70 or even 80 per cent. would have to be renewed, owing to the fact that much sound timber which is badly perished only at the joints would require to be replaced. This would probably necessitate taking down the whole of some of the trusses. Such wholesale renewal stands condemned upon historical and archaeological grounds. The method proposed, and which has since been approved, is to maintain the roof in its integrity by a full scheme of steel reinforcement, designed so as to affect the appearance of the structure as little as possible, and to afford adequate support to every one of its members. By this means every vestige of the original wood unaffected by decay can be retained, and only certain portions, such as entirely perished purlins, will have to be wholly renewed. A description and several drawings give particulars of this steelwork, which has been designed to fulfil the following conditions:—(1) Not to prejudice seriously the appearance of the roof and the general amenities of the structure; (2) to be adequate not only to carry effectually the weight of the trusses, but to support each main member so that it can be pieced up where decayed, rather than entirely removed; (3) not to transfer too great a thrusting stress on to the walls; (4) to provide against the possibility of collapse in any of the trusses, should further dangerous decay take place. It is proposed to deal with one bay at a time.

For the erection of the steelwork and to carry the part of the roof upon which work is proceeding, a steel centre or scaffolding on rollers has been designed, of which drawings are given. This, if carried to the ridge, will weigh 150 to 170 tons, and will be designed to carry 175 tons. Owing to the decay having affected the joints of the members of the roof it has been necessary to design the centre "to clip and carry each individual member of the truss freely and by itself at points where the timber is sound," and to maintain the trusses absolutely in their present positions without wedging up or drawing together.

The estimated cost of the whole of the work dealt with in the Report is £60,000. Very possibly, as "M.Inst.C.E." wrote in the *Times* of 17th June, an entirely new roof could be erected for much less, and no doubt to his mechanical soul "the result would be

more satisfactory." Far better has it been to leave the solution of the problem to those whose training in "ordinary architecture" he deprecates than to give it to those who, like himself, would, on the score of economy, ruthlessly sweep away a unique memorial of the past.

W. J. DAVIES [A.].

A USEFUL HANDBOOK.

Commercial Paints and Painting: A Handbook for Architects, Engineers, Property Owners, Painters and Decorators, etc. By A. Seymour Jennings. 8s. Lond. 1914. 6s. net. [Constable & Co., Ltd., 10 Orange Street, Leicester Square.]

This work, forming one of the publishers' "Westminster Series," aims at giving direct practical information based on the author's experience to those responsible for using and specifying paints, in a reasonable compass and to a greater degree than many works on this large subject.

Paint ingredients are discussed in the first part of the book, a section prefaced by a necessary if somewhat laboured exposition on the economy of good materials. The physical characters of the solid ingredients upon which durability so much depends are discussed in a manner free from technicalities, and their relation to cost is considered. A chapter which should be welcomed by architects, entitled "Paint most suitable for different Surfaces," contains much useful advice on matters which often require more definite specification than they receive, in which connection it should be borne in mind that it is not only the kind of paint, but often the method and time of application which must be regarded to ensure success in the case of wall and special surfaces. The book concludes with an account of the tools and methods employed in application.

To those whose leisure or interest debars them from studying the fuller technicalities of this subject, the book will prove both profitable and palatable, and it may be recommended to architects anxious to treat this trade more fully in their specifications.

ALAN E. MUNBY [F.].

CORRESPONDENCE.

Cessation of Building towards the end of the Tenth Century A.D.

Langstone, Erdington: 4th September 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR.—In a note at the foot of p. 625 in the August number of the JOURNAL we are told that "there was a slackening of effort prior to the year 1000 (when it was supposed that the end of the world was to occur), and a great outbreak of building throughout Europe after that date." This is a statement one often meets with, but surely, as far as England is concerned, the closing years of the tenth century, the time of Edgar and Dunstan, were far from seeing any slackening of building effort—rather, to quote Professor Baldwin Brown, they "witnessed a widely-diffused revival," and with regard to France one need only read the list of buildings mentioned by Saint-Paul in chapter vii. of his *Histoire Monumentale de la*

France, which were "entrepris ou continués dans les vingt dernières années du dixième siècle," to be convinced that the alleged belief in the approaching end of the world by no means arrested the activity of the French builders of that period.

BENJAMIN WALKER [A.].

The Allied Societies and the Institute Funds.

The Guildhall, E.C.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—In the JOURNAL of the 25th July (p. 605) you kindly published a letter from me stating that the Allied Societies cost the R.I.B.A. £619 15s. for the year 1913. Mr. Wigfull writes in the August number: "We all know the Allied Societies, as such, do not contribute to the funds of the Institute."

Members may be aware of that fact: I hope they are, but I know that recently many men did not know how much we pay the Allied Societies.

The contributions are in accordance with By-law 82, which states that if a member of the Institute joins an Allied Society the R.I.B.A. shall contribute not more than one-fourth of the annual subscription of that member. In other words, according to the present arrangements, if I join an Allied Society, the funds of the R.I.B.A. would forthwith be mulcted of £1 la. per annum. Anything more absurd it is hard to imagine. This ridiculous system does not exist in any other similar society.

It certainly seems to me that if a local society is allied to the parent body that the Institute should not at least suffer financially.

Mr. Wigfull writes: "The great majority of our Licentiates are, I believe, provincial architects." That is true, but he does not tell you how few of them belong to Allied Societies. On the 8th June the provincial Licentiates numbered 1,293, and only about 440 belonged to Allied Societies. Do our allied friends now want a part of the subscriptions of the Licentiates?

May I trespass on your space to state that there are many and strong reasons in favour of the Presidents of our leading Allied Societies, such as Birmingham, Liverpool, Manchester, Newcastle and Glasgow, having seats on our Council but to grant that privilege to a new Society containing a minimum of one Fellow of the Institute and 49 outside architects would, I submit, be grossly unfair to our own Fellows and Associates.—Yours faithfully,

SYDNEY PERKS [F.].

The Allied Societies and the Institute.

Baybridge, near Winchester, 3rd Sept., 1914.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Mr. Sydney Perks describes the abbreviation of his statement about the Edinburgh and the Hampshire Architectural Associations by another speaker as "ridiculous." But his full statement as printed is more than ridiculous.

It distinctly implies, and, seeing that he has referred since to it without its correction, it appears to have been intended to imply, that (1) Hampshire members

of the R.I.B.A. are scarcely, if at all, represented in the Hampshire and Isle of Wight Association of Architects, and (2) that the bulk of our members are merely "Gentlemen interested in furthering the Association's objects."

Here are Mr. Perks' words (JOURNAL, 13th June, 1914, p. 520):—

"But our members in the provinces do not, as a rule, belong to the Allied Societies: over two-thirds of the members of Allied Societies are not our members; they are not qualified, they are not necessarily architects. I will give you the exact words from our KALENDAR. In one case they are persons engaged in artistic or collateral pursuits, or interested in the study of architecture; in another case they are gentlemen interested in the furtherance of the objects of the local societies. Take the Edinburgh Association: 'Persons engaged in artistic or collateral pursuits, or interested in the study of architecture.' The other which I quoted is the Hampshire and Isle of Wight Association: 'Gentlemen interested in the furtherance of the objects of the Hampshire and Isle of Wight Association.'"

Now here are the qualifications for membership in the H. & I.W.A.A. (KALENDAR, p. 335) in respect of which Mr. Perks professed to give "the exact words": "The Association consists of three classes of members: (1) Fellows, who must be members of the R.I.B.A.; (2) Associates, being other architects, Assistants, Pupils, or gentlemen engaged in public offices to do architectural work, or interested in the furtherance of the objects of the H. & I.W.A.A.; (3) Honorary members."

It is not necessary to comment on arguments supported in the way Mr. Perks has (unsuccessfully) supported his, but I may say that out of the 33 Fellows and Associates mentioned under "Hampshire" (KALENDAR, p. 242) no less than 20 are members of the local Association, besides whom we have also a retired Fellow, an Honorary Associate, and a recently-elected A.R.I.B.A.

As may be seen from the fully-quoted qualifications of membership, this Association could hardly exist were it not for its R.I.B.A. members, who control it entirely, and have done so since its formation.

"I simply plead," said Mr. Perks, "for justice." But would it not be better if he first saw to it that his quotations were full and correct and his insinuations not misleading and unfair?—Yours, etc.,

R. MACDONALD LUCAS [F.].

Hon. Sec. and Treasurer, H. & I.W.A.A.

The Allied Societies.

38 Church Street, Sheffield, 23rd Sept., 1914.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—Mr. Sydney Perks, by his letter in your issue of the 20th August last, appears to be annoyed that attention was called by me to what he styles "ridiculous statements" he made on the 8th June at the R.I.B.A. meeting, but if members will take the trouble to refer to the JOURNAL for the 13th June, page 520, they will be able to see what Mr. Perks said, and from the report and speeches made then and afterwards they can draw their own conclusions.

Yours obediently,

A. F. WATSON [F.].



9 CONDUIT STREET, LONDON, W., 17th October 1914.

CHRONICLE.

The Architects' War Committee.

A recent report of the Architects' War Committee (Mr. C. Stanley Peach [F.], *Hon. Secretary*) states that in response to the appeal sent out the sum of £219 5s. for the Prince of Wales's Fund and £664 12s. for the General Fund for the assistance of architects in case of distress arising out of the War have been received up to the 7th October.

In reply to the letter offering the services of architects to the Government the Committee have received a letter of thanks from the Right Hon. Joseph Pease and intimation that the letter has been circulated among the Government Departments interested, and an acknowledgment has also been received from the War Office.

The Committee received a request from the Adjutant of one of the new battalions of Lord Kitchener's Army to provide an architect to get in tenders and superintend the erection of huts, and the request was complied with within a few hours.

The War Committee were also requested to find picked mechanics for special service. The work was undertaken by the Architects' Volunteer Training Corps under the direction of the Architectural Association, and the whole of the men required were found within the time stipulated. Further calls also at very short notice were promptly met.

In this connection the officers of the Architects' Volunteer Training Corps desire to thank the architects and builders of London and the trade organisations for their prompt attention to the appeal and the energetic way in which they have all worked to assist the Government in finding the men wanted. All who helped are requested to accept this notice of thanks, as, in view of the magnitude of the work and the number of letters received, it is quite impossible to write individually.

The Benevolent Sub-Committee are considering, in conjunction with the Architects' Benevolent Society and representatives of the Architects' and Surveyors' Approved Society, a scheme for joint action for the relief of distress among architects which may arise in consequence of the war.

A scheme for finding employment has been out-

lined by Mr. H. V. Lanchester and adopted in principle by the Sub-Committee. The scheme may be described shortly as a proposed inauguration of civic surveys of all the larger cities. The surveys are to cover the following ground: Archaeological, Social and Recreative, Educational, Hygienic, Commercial, Traffic, Valuation. The idea is to provide complete data upon which to base town-planning schemes.

An additional scheme is also being prepared which is based on the original proposals made by the Society of Architects—the measurement of buildings of historical and architectural interest, etc.

The Selection Committee, in co-operation with the Allied Societies, are preparing lists of architects in all parts of the country competent to undertake works which, so far as can be foreseen, are likely to be required by the Government.

A circular letter has been sent to the Allied Societies asking them to draw up schemes for dealing with distress, etc., in their particular localities.

Up to the present time the Committee have no information of any exceptional distress among architects.

An organisation has been formed under Mrs. Maurice Webb to keep in touch with all men at the front who have joined the Regular Forces through the Architects' Volunteer Training Corps, to send them comforts and to look after their wives and families, and see that they have all allowances to which they are entitled and every assistance which can be given.

The wives and daughters of London architects are earnestly requested to give all the assistance in their power to this organisation, and to send any gifts for men at the front to Tufton Street. Mrs. Webb will be glad to hear of any ladies who would be willing to call on the wives and families in their particular neighbourhood, and who would specially look after those in charge of the children of widowers while the fathers are at the front.

The R.I.B.A. Record of Honour: Second List.

The following is a further list of names received in response to the request for information as to Members, Licentiates, and Students of the Institute who are serving their country in the Army or Navy during the War:—

FELLOWS.

- Cable, W. H. Dashwood: Major, Royal Engineers.
 Fawcokner, E. H.: Major, 3rd Battalion Monmouthshire Regiment (Terr.).
 Fisher, J. W.: Major, 4th Battalion Northamptonshire Regiment.
 Flockton, C. B.: Captain, W. R. D. R. E. (Terr.).
 Lucas, W. L.: Captain, Royal Field Artillery.
 Mathews, Henry Edmund: Captain, 4th Battalion Royal Sussex.

ASSOCIATES.

- Bax, E. G.: Artists' Rifles.
 Chetwood, Henry J.: Artists' Rifles.
 Brough, W. J.: Artists' Rifles.
 Chisholm, David J.: London Scottish Regiment (now in France).
 Crowe, J.: 25th (County of London) Cyclist Battalion.

Dossor, John M.: Captain, 2nd Northumbrian Royal Field Artillery (Terr.).
 Dyer, Frank: 6th West Yorkshire Regiment.
 Garbutt, Wilfred T.: 6th West Yorkshire Regiment.
 Gibbs, H. B. S.: Artists' Rifles.
 Hartmann, C. Herbert: Artists' Rifles.
 Lawson, J. Boyd: London Scottish Regiment (now in France).
 Meakin, F.: Sheffield Battalion York and Lancaster Regiment.
 Quirke, W. Dathy: 5th City of London (London Rifle Brigade).
 Rahbula, Ernest A. R.: 1st County of London Yeomanry (London Mounted Brigade).
 Reavell, George, jun.: Major, 7th Battalion Northumberland Fusiliers.
 Roberts, R. G.: Sheffield Battalion York and Lancaster Regiment.
 Robinson, J. C.: Artists' Rifles.
 Scott, Bernard W. H.: 1st Surrey Rifles (Terr.).
 Shoars, Reginald: 9th Battalion Queen Victoria Rifles.
 Smith, Edwin T.: R.N. Div., Engineering Unit.

Erratum.—The name of Mr. H. J. Wilson [A.] was inserted in error in the last list [p. 687].

LICENTIATES.

Baines, C. Owen: Royal Engineers (Devon Fortress Section) (Terr.).
 Dane, H. E.: Cinque Ports Fortress Royal Engineers.
 Hammond, P. S.: Captain, 11th County of London Battalion.
 Hawkes, T. F.: Queen's Westminster Rifles.
 Helbromner, P. M.: Reservist, French Army.
 Masey, Cecil: 2nd London Brigade, Royal Field Artillery.
 Page, G. M.: South Notts Hussars.
 Richardson, H. T.: 4th King's Shropshire Light Infantry (Terr.).
 Richardson, John E.: Honourable Artillery Company.
 Smith, G. T.: Honourable Artillery Company.

STUDENTS.

Dicksee, H. J. H.: Artists' Rifles.
 Durston, C. C.: Lieutenant, A Battery Honourable Artillery Company.
 Hooper, Arnold F.: Lieutenant, 5th Battalion Royal West Kent Regiment.
 Keesey, W. M.: Royal Engineers.
 Knott, A. J.: South African Artillery.
 Odom, J. H.: Sherwood Foresters.
 Philp, R. M. H.: King Edward's Horse.
 Portsmouth, O. S.: Lieutenant, 1st Welsh Brigade (Howitzer) R.F.A. (Terr.).
 Ripley, C. Gurney: Lieutenant, Army Service Corps.
 Rylatt, A.: 5th Battalion Notts and Derby Regiment.
 Snell, A.: Territorials.
 Waddington, Harold G.: Duke of Lancaster's Own Yeomanry.

Lieut. Arnold Hooper, mentioned above, is a son of Mr. Francis Hooper [F]. His elder brother, Lieut. Kenneth Hooper, of the East Lancashire Regiment, was wounded near Cambrai on the 26th August, and is reported missing.

Mr. Briant A. Poulter [*Licentiate*], of the firm of Tubbs (Cyril B.), Messer (Arthur A.) & Poulter, of London, Newbury, and Bexhill-on-Sea, writes: "In reply to your appeal, my two partners have taken motor ambulances to France, my London staff has joined the army, and I am a special constable and have lent two of my rooms to the Voluntary Assistance Department: so feel we have done our duty."

The regiment to which Major H. Phillips Fletcher [F.] and Lieut. C. D. Carus-Wilson [A.] belong is the Middlesex Hussars (1st County of London

Yeomanry)—not the Duke of Cambridge's, as described in the last issue.

Mr. Laurence Direks, son of the Librarian of the Institute, has been gazetted Lieutenant of the London Irish Rifles.

The Timber Supply: Board of Trade Conference.

At the invitation of the Board of Trade delegates of the R.I.B.A. were present at a Conference of representatives of the building trade which had been arranged by the Board to consider the question of present and prospective supplies of timber for building purposes. The Conference was held on the 6th inst., and was attended by Messrs. Max Clarke [F.], Alan E. Munby [F.], and Ernest Flint [F.] on behalf of the Institute, and by representatives of the National Federation of Building Trades Employers, the Institute of Builders, the London Master Builders' Association, and officials of the Board of Trade. One of the questions discussed was the matter of shortage, and to what extent it could be remedied by substitutions from other sources of supply outside the war area. It was suggested that there were suitable substitute timbers of Canadian growth—red pine, for example—which might be made more available through the good offices of the Board of Trade Commission now in Canada for the purpose of obtaining substitute supplies of pit-prop timbers. As regards prices, reports received by the builders' organization and the Board of Trade showed that the cost of deals, battens, and boards had advanced from 15 to 20 per cent., and in some districts as much as 33 per cent. It was suggested that a joint committee, representing merchants, builders, architects, and governing authorities, might be constituted for the purpose of considering the question of supplies and prices. Another suggestion was that the Government should extend its marine insurance arrangements to cover timber cargoes in neutral bottoms.

The Building Trade.

The Chancellor of the Exchequer, replying to the Workers' Committee deputation on the 6th inst., said that he had been informed, with regard to the building trade, that things were improving steadily, but that there was a good deal of unemployment. He had had a discussion with the First Commissioner of Works (Lord Emmott), and they thought it desirable to take full powers this year for the erection of all the Government buildings which they thought they should have to undertake in the course of the next two years. They intended to put down a very considerable sum on the Estimates, and they could either begin those works or postpone them, according to the necessities of the case. A good many post offices and Government buildings of one kind and another no doubt would have to be erected in the course of the next five years. In the ordinary course he should have spread those buildings over the Estimates of the next five or six years; now most of them would probably be

crowded into the Estimates of the coming year. The advantage of that would be that they could watch the state of the building market, and if it looked as if there were going to be considerable distress, they could put forward those buildings, or postpone them, as the case might be. At any rate, they were going to take full powers for the erection of those buildings.

The War: Sympathy from America.

Mr. Irving K. Pond, the distinguished Chicago architect, lately President of the American Institute of Architects, in a letter to Mr. Raymond Unwin [F.] asks him to convey to his professional brethren whom he met during his visit in England an expression of his sympathy and encouragement in this time of stress and trouble. "Every man in America," says Mr. Pond, "who believes in democracy as opposed to militarism is with you in this struggle; every man in this country who believes that treaties should not be broken nor neutrality violated in the stress of war is with you."

The Architectural Association.

Mr. H. Austen Hall [F.], Acting President of the A. A. in the absence of Mr. Maurice Webb who is serving with the Colours, writes:—

"There have been many inquiries as to whether the Architectural Association is carrying on its educational work during this crisis in national affairs, and I, therefore, should like to make it known as far as possible that everything is being carried on as in normal times. The Day and Evening Classes are necessarily depleted by the patriotic response of a large number of students to Lord Kitchener's appeal; but there are still many students who, for various reasons, are unable to join the Forces, and these are very properly continuing their studies. I would urge the importance of all students continuing their educational work if they are unable to enlist.

"Apart from the work in the School, considerable recruiting is going forward at 18 Tufton Street from the ranks of architects and men of kindred professions, and also (at the request of the authorities) amongst skilled mechanics connected with the building trade.

"I feel sure that members and others will be glad to know that the A.A. is carrying on its work and doing its best in other ways to be of some practical service to the country."

Comforts for Architects on Service.

Mrs. Maurice Webb, whose husband, the President of the Architectural Association, is serving with the Royal Engineers, writes:

I feel sure that architects will be interested to know that some 150 members of the Architectural Association, including the President of the A.A., are now serving in the Army and the Territorials. Several instances have come to my notice of unnecessary hardships owing to the lack of simple comforts. It has been suggested by some of the men themselves that the Association might act as a central body to

look after, as far as possible, the interests of the A.A. men and their friends serving with the Colours either at home or abroad.

For this purpose a small sub-committee has been formed which is in touch with the various units, to find out their immediate wants. I attach below a list of the articles that are now most wanted, and I earnestly ask for assistance. All offers of help and gifts in money and kind should be addressed to me at the offices of the Association, 18, Tufton Street, Westminster, S.W., and I shall be very glad to give any further information to inquiries sent to me at that address.

List of articles required: Blankets, belts (knitted or woven), sleeping helmets, flannel shirts, socks, towels, soap, tobacco, cigarettes, papers (daily and weekly), magazines.

Rheims Cathedral: Official Statement of Damage.

The damage done to Rheims Cathedral is officially given in a note issued from Bordeaux by the French Under-Secretary of State for Fine Arts, which says:

"Rheims Cathedral was shelled several times. It had all the roofing burned and the stained-glass windows riddled, and to a large extent broken.

"The northern tower of the façade, which was struck by shells in the upper part over the portal, was seriously damaged by flames. The sculptural decorations and statues are irreparable.

"Inside the church, straw, which had been collected for the wounded, caught fire, generally damaging the stonework. The wall facings are burnt and the masonry charred.

"Instructions have been given to protect the vaults by building temporary roofing."

The Chadwick Trust and the War.

The following resolution has been passed by the Chadwick Trustees:—

"That in view of the immense importance of encouraging in every way the promotion of careful sanitary organisation in the Naval and Military Services during the present campaign the Chadwick Trustees have resolved under the powers conferred upon them under the Scheme they administer to announce their intention to award at the close of this year the Chadwick Gold Medal and £50 each to the Naval and Military Medical Officer respectively in the British Service who shall have distinguished himself most in promoting the health of the men in the Navy and the Army.

The nomination for such presentations to be, as provided by the terms of the Trust, by the Directors-General of the Naval and Military Medical Services respectively."

The Chadwick Trustees are also making arrangements for providing, or assisting in the provision of, lectures and demonstrations on Naval, Military and Hospital Hygiene. Particulars of these lectures will shortly be announced.

The Alexander Thomson Travelling Studentship.

Mr. C. J. Maclean, Secretary of the Glasgow Institute of Architects, writes that owing to the war the Trustees have decided to postpone the compe-

tion for this Studentship for one year. All students who were eligible this year and have now gone on military duty will be allowed to compete when the competition is held.

New Feeble-Minded Colony at Prudhoe.

The Northern Counties Joint Poor Law Committee at their September meeting held at the Newcastle Union Offices, appointed Messrs. J. H. Morton [F.] and J. G. Burrell [Licentiate], of South Shields, Durham, and Newcastle-upon-Tyne, joint architects to carry out the buildings for the new feeble-minded colony to be erected at Prudhoe Hall.

School of Art Wood-carving.

The School of Art Wood-carving, 39, Thurloe Place, South Kensington, which is under Royal patronage, has been reopened after the usual summer vacation, and we are requested to state that some of the free studentships in the evening classes maintained by means of funds granted to the school by the London County Council are vacant. The day classes of the school are held from 9 to 1 and 2 to 5 on five days of the week, and from 9 to 1 on Saturdays. The evening class meets on three evenings a week and on Saturday afternoons. Forms of application for the free studentships and any further particulars relating to the school may be obtained from the Secretary.

Rodin's "Burghers of Calais."

Rodin's statuary group, "Burghers of Calais," the gift of the National Art-Collections Fund, has been placed in position in the Victoria Tower Gardens, Westminster. It stands on a pedestal 17 feet high, and with the mass of the Victoria Tower as a background has a much more effective setting than the original at Calais. The site was the choice of M. Rodin himself after a tour through London last summer. The casting of the group was done in France, and the work brought to this country some months ago, since when it has lain in the vaults of the Houses of Parliament.

Louvain.

The *Architectural Review* for October is devoted almost exclusively to the tragedy of Louvain, and 12 beautifully produced plates and numerous smaller illustrations are given of the chief architectural treasures of the city as they existed before the war, together with photographic views showing the wreck and ruin that followed upon the German visitation. Judging from the photographs, some quarters of the city have been blotted out altogether, and others are so battered and mutilated as to be scarcely recognisable even by their own people. The publishers are to be congratulated upon the timely production of this valuable record of the late city, one of the most cherished possessions of a martyred country.

COMPETITIONS.

Federal Parliament Houses, Canberra.

Owing to the state of war existing, the Government of the Commonwealth of Australia has decided to postpone, until a more favourable time, the competition for the design of the Federal Parliament Houses to be built at Canberra. It was intended that the competition should be open to architects from all parts of the world, and that it should close in London and Melbourne during March 1915.

Northampton Water Works Committee: Competition for Workmen's Dwellings, Hollowell.

Members and Licentiates of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

By Order of the Council.

29th September 1914.

IAN MACALISTER, Secretary.

THE EXAMINATIONS.

The Final: Designs approved.

The Board of Architectural Education announce that the designs submitted by the following Students who are qualifying for the Final Examination have been approved:—

SUBJECT XVI.

(a) DESIGN FOR AN ISLAND HOTEL AND TEA GARDENS.

Cashmore: F. M.	Hossack: J. D.	Lawton: W. V.
Fraser: R.	Howcroft: G. B.	Pace: C. L.
Heywood: L.	Koch: M. D. N.	St. Leger: C. D.

(b) DESIGN FOR A DAIRY AND FARMSTEAD.

Blackburn: N. A.	Keep: N.	Rayson: T.
Chandler: H. F.	Lawton: W. V.	Stedham: P. N.
Farrer: J. C.	Mackey: S. A. H.	Venn: G. O.
Grellier: C.	Moore: J.	Wood: A. G.
Horsburgh: A. L.	Nathanielsz, J. J.	

OTHER SUBJECTS.

Fisher: H. N., Design for College Library.
Smith: A., Design for Group of Cottages.

The Intermediate Examination: Exemption.

Mr. Walter Moreckton Keese, A.R.C.A. [*Probationer* 1913], of 2 Priory Gardens, Bedford Park, W., having satisfied the Board of Architectural Education as to his qualifications and training, has been granted exemption from sitting for the Intermediate Examination and has been registered as Student R.I.B.A.

The Architects' Benevolent Society.

The Architects' Benevolent Society have received an intimation from Miss Rose that her aunt, Mrs. Arthur Cates, has left to the Society a legacy of £1,000.

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